This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

BOSTON
MEDICAL LIBRARY
8 THE FENWAY

TRANSACTIONS

OF THE

TWENTY-FIRST SESSION

OF THE

AMERICAN INSTITUTE OF HOMŒOPATHY,

HELD IN ST. LOUIS, JUNE 2, 3, 4, AND 5, 1868.

NEW SERIES.

BOSTON:
ALFRED MUDGE AND SON, PRINTERS, 34 SCHOOL STREET,
1869.

BOSTON MEDICAL
APR 20 1965
LIBRARY

Entered, according to Act of Congress, in the year 1869,
By I. T. Talbot,
In the Clerk's Office of the District Court of the District of Massachusetts.

CONTENTS.

Section I.

Proceedings and Miscellaneous Papers.

	Officers of the Institute for 1868–9	163
Art. IX.	Proceedings of the Twenty-first Session	167
	Address by T. G. Comstock, M.D.	168
	Election of officers	170
	President's Address. H. D. Paine, M.D.	170
	Discussion on Delinquent Members	171
	Remarks of Dr. John Moore	173
	Committee on Finance	175
	Report of Committee on Delegates	176
	Members elected	183
	Bureau of Materia Medica	186
	" " Organization	188, 217
	Discussion on Michigan University	189
	Evening Session	193
	Resolutions on Michigan University	194
	Homœopathic Physicians on Boards of Health	201
	Case of Bailey *vs.* Neilson	202, 231
	Bureau of Clinical Medicine	204
	Discussion on Pathological Anatomy	205
	Bureau of Surgery	208
	Bureau of Obstetrics	210, 217
	Bureau of Anatomy and Physiology	211
	Discussion on Annual Addresses	212
	Excursion Festival	216
	Bureau of Hygiene	216
	Homœopathic Dispensatory	232
	Admission of Female Members	233
	Appointment of Committees	235
X.	Annual Address. Henry B. Clarke, M.D.	237
XI.	Report of the Treasurer. E. M. Kellogg, M.D.	255
XII.	Constitution and By-Laws.	256
XIII.	Resolutions.	262
XIV.	List of Members, June 1868.	267
XV.	List of Deceased Members, June 1868.	284

Section II.

Report of the Bureau of Materia Medica, Pharmacy and Provings.

Art. V.	Lilium tigrinum. William E. Payne, M.D.	101
VI.	Iris versicolor. Conrad Wesselhoeft, M.D.	113
VII.	Ptelea trifoliata. Edwin M. Hale, M.D.	157
VIII.	History of the Homœopathic Materia Medica. S. B. Barlow, M.D.	240
IX.	Materia Medica, Therapeutics and Pharmacy. W. Williamson, M.D.	253

SECTION III.

Report of the Bureau of Clinical Medicine and Zymoses.

ART. VI. Therapeutics as related to Pathological Anatomy. P. P. WELLS, M.D. . 58
VII. Suggestions upon Hydrothorax. S. M. CATE, M.D. 71
VIII. The Epidemic of Yellow Fever at New Orleans in 1867. WM. H. HOLCOMBE, M.D. 101
IX. Case of Obstruction of the Bowels. GEO. E. BELCHER, M.D. . . . 121
X. Tuberculosis with Sound Lungs. DAVID COWLEY, M.D. 125
XI. Thermometrical Phenomena in Disease. JOHN J. MITCHELL, M.D. . . 132

SECTION IV.

Report of the Bureau of Obstetrics.

ART. IV. Report on Obstetrics. HENRY N. GUERNSEY, M.D. 33
V. Obstetric Notes. J. H. WOODBURY, M.D. 38
VI. Spasm and Rigidity of the Os Uteri. REUBEN LUDLAM, M.D. . . . 45
VII. Rupture of the Thoracic Aorta in an Infant. H. H. HOFMANN, M.D. . 63

SECTION V.

Report of the Bureau of Surgery.

ART. IX. Strangulated Femoral Hernia. J. BEAKLEY, M.D. 43
X. Ligature of the External Iliac Artery. J. BEAKLEY, M.D. 47
XI. Surgical Operations. G. D. BEEBE, M.D. 51
XII. Imperforate Anus. E. C. FRANKLIN, M.D. 55
XIII. Cases from Practice. J. C. MORGAN, M.D. 64
XIV. Pittsburg Hospital Cases. L. H. WILLARD, M.D. 71
XV. Surgical Experiences. T. G. COMSTOCK, M.D. 74
XVI. Caries of the Ankle-Joint. J. H. MCCLELLAND, M.D. 78

SECTION VI.

Report of the Bureau of Organization, Registration, and Statistics.

ART. V. General Report of the Bureau 69
VI. Report of the Committee on Foreign Correspondence 74
VII. Report of B. W. James, M.D., Delegate to Paris 81
VIII. Reports of Homœopathic Institutions: —
1. State Societies 83
2. County and Local Societies 96
3. Hospitals, Infirmaries, etc. 102
4. Dispensaries 110
5. Colleges 119
6. Medical Journals 122

SECTION VII.

Reports of the Bureaus of Anatomy, Physiology and Hygiene.

ART. I. Report on Anatomy. T. F. ALLEN, M.D. 3
II. Report on Physiology. J. H. P. FROST, M.D. 8
III. The Province and Medical Application of Hygiene. CARROLL DUNHAM, M.D. 23
IV. Atmosphere and Water. N. D. TIRRELL, M.D. 50
V. Alcohol as a Hygienic Agent. C. W. BOYCE, M.D. 65
VI. Formation of Sound Teeth. HENRY S. CHASE, M.D. 71
VII. Shedding of Deciduous Teeth. HENRY S. CHASE, M.D. 76

SECTION I.

PROCEEDINGS

AND

MISCELLANEOUS PAPERS

OF THE

TWENTY-FIRST SESSION

OF THE

American Institute of Homœopathy.

VOLUME I. NUMBER 2.

CONTENTS.

IX. Proceedings of the Twenty-first Session.
X. Annual Address. - - - - - - - H. B. CLARKE, M.D.
XI. Report of the Treasurer. - - - - - - E. M. KELLOGG, M.D.
XII. Constitution and By-Laws.
XIII. Resolutions.
XIV. List of Members, June, 1868.
XV. List of Deceased Members, June, 1868.

AMERICAN INSTITUTE OF HOMŒOPATHY.

OFFICERS FOR 1868-9.

President.

HENRY D. PAINE, M.D. . . . . NEW YORK.

Vice-President.

T. G. COMSTOCK, M.D. . . . . ST. LOUIS.

Vice-Presidents, ex officio.

C. H. BURR, M.D. . . . PORTLAND, ME.
A. MORRILL, M.D. . . CONCORD, N.H.
C. B. CURRIER, M.D. MIDDLEBURY, VT.
H. L. CHASE, M.D. . CAMBRIDGE, MASS.
J. H. AUSTIN, M.D. . . BRISTOL, CONN.
W. H. WATSON, M.D. . . UTICA, N.Y.
J. J. YOULIN, M.D. . JERSEY CITY, N.J.
COATES PRESTON, M.D. CHESTER, PENN.
W. WEBSTER, M.D. . DAYTON, OHIO.
C. A. JEFFERIES, M.D. ANN ARBOR, MICH.
O. P. BAER, M.D. . . . RICHMOND, IND.
G. D. BEEBE, M.D. . . . CHICAGO, ILL.

Corresponding Secretaries, ex officio.

C. A. COCHRAN, M.D. . WINTHROP, ME.
J. H. GALLINGER, M.D. CONCORD, N.H.
H. M. HUNTER, M.D. ST. JOHNSBURY, VT.
L. MACFARLAND, M.D. BOSTON, MASS.
E. C. KNIGHT, M.D. WATERBURY, CONN.
H. M. PAINE, M.D. . . ALBANY, N.Y.
S. B. TOMPKINS, M.D. . NEWARK, N.J.
B. W. JAMES, M.D. PHILADELPHIA, PA.
T. P. WILSON, M.D. CLEVELAND, OHIO.
J. D. CRAIG, M.D. . . . . NILES, MICH.
C. P. JENNINGS, M.D. SHELBYVILLE, IND.
J. S. MITCHELL, M.D. . CHICAGO, ILL.

General Secretary.

I. T. TALBOT, M.D. . . . . BOSTON, MASS.

Provisional Secretary.

H. L. CHASE, M.D. . . . . CAMBRIDGE MASS.

Treasurer.

EDWIN M. KELLOGG, M.D. . . . . NEW YORK.

Censors.

J. P. DAKE, M.D. . . . SALEM, OHIO.
G. W. SWAZEY, M.D. SPRINGFIED, MASS.
G. D. BEEBE, M.D. . . . . CHICAGO.
JOHN C. MORGAN, M.D. PHILADELPHIA.
JOHN HARTMANN, M.D. . . ST. LOUIS.

Committee on Credentials.

L. DE V. WILDER, M.D. . . NEW YORK.
J. C. BURGHER, M.D. . PITTSBURG, PA.
D. THAYER, M.D. . . . . BOSTON.
F. WOODRUFF, M.D. ANN ARBOR, MICH.
T. S. VERDI, M.D. . WASHINGTON, D.C.

Auditing Committee.

A. E. SMALL, M.D. . . . . CHICAGO.
E. C. FRANKLIN, M.D. . . ST. LOUIS.
G. E. BELCHER, M.D. . . . NEW YORK.
S. GREGG, M.D. . . . . BOSTON.
R. MCMURRAY, M.D. . . . NEW YORK.

Executive and Publication Committee.

HENRY D. PAINE, M.D. . . NEW YORK.
T. G. COMSTOCK, M.D. . . ST. LOUIS.
I. T. TALBOT, M.D. . . . . BOSTON.
H. L. CHASE, M.D. . CAMBRIDGE, MASS.
E. M. KELLOGG, M.D. . . NEW YORK.

Committee of Arrangements.

D. THAYER, M.D. . . . . BOSTON.
L. MACFARLAND, M.D. . . . BOSTON.
S. GREGG, M.D. . . . . BOSTON.
M. FULLER, M.D. . . . . BOSTON.
I. T. TALBOT, M.D. . . . . BOSTON.

Orator for 1869.

R. LUDLAM, M.D. . . . . CHICAGO.

Alternate Orator.

E. M. KELLOGG, M.D. . . . . NEW YORK.

Necrologist.

S. B. BARLOW, M.D. . . . . NEW YORK.

Bureau of Materia Medica, Pharmacy, and Provings.

C. WESSELHOEFT, M.D. DORCHESTER, MASS.
W. WILLIAMSON, M.D. PHILADELPHIA.
W. E. PAYNE, M.D. . . BATH, MAINE.
H. L. CHASE, M.D. . CAMBRIDGE, MASS.
S. B. BARLOW, M.D. . . . NEW YORK.
E. M. HALE, M.D. . . . . CHICAGO.
J. P. DAKE, M.D. . . . SALEM, OHIO.
G. E. BELCHER, M.D. . . NEW YORK.
J. L. KEEP, M.D. . . . . BROOKLYN.

Bureau of Clinical Medicine.

H. D. PAINE, M.D. . . . . NEW YORK.
S. M. CATE, M.D. . . . SALEM, MASS.
D. H. BECKWITH, M.D. . . CLEVELAND.
S. GREGG, M.D. . . . . BOSTON.
P. P. WELLS, M.D. . . . . BROOKLYN.
J. C. BURGHER, M.D. . . . PITTSBURG.
N. F. COOKE, M.D. . . . . CHICAGO.
W. H. HOLCOMBE, M.D. NEW ORLEANS.
J. HARTMANN, M.D. . . . . ST. LOUIS.

Bureau of Obstetrics.

R. LUDLAM, M.D. . . . . CHICAGO.
H. N. GUERNSEY, M.D. PHILADELPHIA.
J. H. WOODBURY, M.D. . . . BOSTON.
T. G. COMSTOCK, M.D. . . ST. LOUIS.
E. M. KELLOGG, M.D. . . . NEW YORK.
J. C. SANDERS, M.D. . . CLEVELAND.
T. F. POMEROY, M.D. . . . . DETROIT.

Bureau of Surgery.

J. BEAKLEY, M.D. . . . . NEW YORK.
W. T. HELMUTH, M.D. . . ST. LOUIS.
G. D. BEEBE, M.D. . . . . CHICAGO.
E. C. FRANKLIN, M.D. . . ST. LOUIS.
B. W. JAMES, M.D. . . PHILADELPHIA.
T. F. ALLEN, M.D. . . . . NEW YORK.
C. T. LIEBOLD, M.D. . . . NEW YORK.
J. C. MORGAN, M.D. . PHILADELPHIA.
M. MACFARLAN, M.D. PHILADELPHIA.

Bureau of Organization, Registration, and Statistics.

H. M. SMITH, M.D. . . . . NEW YORK.
H. M. PAINE, M.D. . . . . ALBANY.
E. B. THOMAS, M.D. . . CINCINNATI.
T. C. DUNCAN, M.D. . . . CHICAGO.
F. WOODRUFF, M.D. ANN ARBOR, MICH.

Bureau of Anatomy, Physiology, and Hygiene.

C. DUNHAM, M.D. . . . . NEW YORK.
J. H. P. FROST, M.D. . PHILADELPHIA.
T. P. WILSON, M.D. . . CLEVELAND.
J. J. MITCHELL, M.D. . . . NEW YORK.
C. W. BOYCE, M.D. . . . AUBURN, N.Y
C. R. MORGAN, M.D. . SYRACUSE, N.Y.
L. M. KENYON, M.D. . BUFFALO, N.Y.

Committee on Medical Education.

C. J. HEMPEL, M.D. GRAND RAPIDS, MICH.
D. S. SMITH, M.D. . . . . CHICAGO.
T. G. COMSTOCK, M.D. . . . ST. LOUIS.
H. B. CLARKE, M.D. NEW BEDFORD, MASS.
G. D. BEEBE, M.D. . . . . CHICAGO.

Committee on Finance.

H. M. SMITH, M.D. . . . NEW YORK.
E. M. KELLOGG, M.D. . . NEW YORK.
I. T. TALBOT, M.D. . . . . BOSTON.
W. WILLIAMSON, M.D. PHILADELPHIA.
E. B. THOMAS, M.D. . . . CINCINNATI.

Committee on Foreign Correspondence.

C. DUNHAM, M.D. . . . . NEW YORK.
T. S. VERDI, M.D. . . . WASHINGTON.
I. T. TALBOT, M.D. . . . . BOSTON.
B. DE GERSDORFF, M.D. SALEM, MASS.
J. H. PULTE, M.D. . . . . CINCINNATI.

Committee on the Publication of a Journal.

T. S. VERDI, M.D. . . . WASHINGTON.
E. C. FRANKLIN, M.D. . . . ST. LOUIS.
G. E. BELCHER, M.D. . . NEW YORK.
H. M. SMITH, M.D. . . . NEW YORK.
C. J. HEMPEL, M.D. . GRAND RAPIDS, MICH.

Committee on a Homœopathic Dispensatory.

CARROLL DUNHAM, M.D. NEW YORK.
C. HERING, M.D. . . PHILADELPHIA.
A. LIPPE, M.D. . . . . PHILADELPHIA.
G. W. BARNES, M.D. . . CLEVELAND.
A. E. SMALL, M.D. . . . . CHICAGO.
J. T. TEMPLE, M.D. . . . . ST. LOUIS.

Committee on Nomenclature, and Pharmacy.

W. WILLIAMSON, M.D. PHILADELPHIA.
C. HERING, M.D. . . PHILADELPHIA.
C. NEIDHARD, M.D. . PHILADELPHIA.
JACOB JEANES, M.D. PHILADELPHIA.
F. E. BOERICKE, M.D. PHILADELPHIA.

IX.

PROCEEDINGS

OF THE

TWENTY-FIRST SESSION

OF THE

AMERICAN INSTITUTE OF HOMŒOPATHY,

HELD IN ST. LOUIS ON JUNE 2, 3, 4, AND 5, 1868.

FROM A STENOGRAPHIC REPORT BY CHARLES E. WELLER.

PRELIMINARY MEETING.

THE meetings of the Institute were held in Philharmonic Hall, corner of Washington Avenue and Fourth Street.

The preliminary meeting was at the house of T. G. Comstock, M.D., on Tuesday, June 2, at eight o'clock, P.M. About fifty members were present. After some time spent in social intercourse, Dr. Comstock called the meeting to order, and Charles J. Hempel, M.D., of Grand Rapids, Michigan, was elected Chairman, and I. T. Talbot, M.D., of Boston, Secretary of the meeting.

A committee of one from each State represented was appointed to nominate a list of officers, and report the same to the Institute, on the following morning at ten o'clock. After considerable discussion as to the manner in which this committee should perform its duties, a motion to discharge the committee prevailed, and it was voted that the

officers should be elected upon open nomination. After some further discussion of subjects upon which no action was taken, the meeting adjourned, and the members were invited by Dr. Comstock to a bountiful collation. The remainder of the evening was spent in a social manner.

FIRST DAY.

Morning Session.

The Institute assembled on Wednesday morning, June 3, at ten o'clock, and was called to order by the President, William Tod Helmuth, M.D., of St. Louis.

T. G. Comstock, M.D., of St. Louis, Chairman of the Committee of Arrangements, then welcomed the members of the Institute in the following remarks:

Gentlemen, Fellow-Colleagues of the American Institute of Homœopathy, — As Chairman of the Committee of Arrangements, I welcome you in the city of St. Louis. Since the founding of this national medical association, twenty-four years ago, our great city has more than quadrupled her population. At that date St. Louis was considered as an outpost upon the western frontier of civilization, and the journey hither from New York was far more tedious and perilous than a journey at the present time from here to Europe. Corresponding with our rapid increase in population, much has been accomplished in medical science; and not a few changes and improvements in the noble art of healing are due to the followers of that renowned philosopher in medicine, Dr. Samuel Hahnemann. Our labors have been pursued amidst the most violent opposition; nevertheless our cause flourishes, and from a small beginning we have grown to be a numerous band.

In this city you will find in successful operation a homœopathic college, empowered to confer the degree of Doctor of

Medicine, and with a charter quite as liberal as those of the allopathic colleges of St. Louis. Here we have also the Good Samaritan Hospital, a charitable institution (as its name indicates), which has been the means of doing a great deal of good, and of demonstrating by statistics the advantageous results of our system. For more than ten years past, this charity has been successfully carried on mainly by the efforts of the director of the hospital, Rev. L. E. Nollau. Under these circumstances it gives us great pleasure that you have selected this oldest city west of the Mississippi for your twenty-first session. Meeting you so far West, we greet you for your disinterested efforts and endeavors to advance the science of therapeutics and improve the materia medica.

Although the homœopathic physicians of St. Louis are fewer in number than our brethren of the old school, yet our influence is recognized by them; and, as a consequence, they have been forced to materially modify their old-time practice of giving nauseous drugs in large and oft-repeated doses: for now we see them beginning to give medicines in sugar-coated pills and granules not unlike our own. This improvment on their part notwithstanding their open and undisguised hostility, is to us a matter of satisfaction, for which we should not fail to give due acknowledgment.

In your deliberations you will have matters of great importance before you; and I trust these discussions may be conducted in such a temper as will bind us together in a spirit of truth, unity and concord, and tend to cement our fraternal relations, so that the influence of the American Institute of Homœopathy may continue to be felt throughout our whole country.

Gentlemen, I hope your stay in our city will be most agreeable to you; and once more I will say, we give you a most cordial and sincere welcome.

On motion, the calling of the roll was omitted.

The Institute then proceeded to the election of officers for the ensuing year. In accordance with the vote at the preliminary meeting, several gentlemen were nominated as candidates for the various offices, and, by ballot, the following were elected, and their election subsequently declared unanimous:

President.

HENRY D. PAINE, M.D.	New York.

Vice-President.

T. G. COMSTOCK, M.D.	St. Louis.

General Secretary.

I. T. TALBOT, M.D.	Boston.

Provisional Secretary.

H. L. CHASE, M.D.	Cambridge, Mass.

Treasurer.

E. M. KELLOGG, M.D.	New York.

Censors.

J. P. DAKE, M. D.	Salem, O.
G. D. BEEBE, M.D.	Chicago.
JOHN C. MORGAN, M.D.	Philadelphia.
J. HARTMANN, M.D.	St. Louis.
GEO. W. SWAZEY, M.D.	Springfield, Mass.

The President elect was conducted to the chair, and addressed the Institute as follows:

Gentlemen of the Institute, —

I can at this time only return my heartfelt and sincere thanks for the unexpected and unsolicited honor which you have conferred upon me with so much unanimity. I think privately that you might have made a much better choice. I am not accustomed to presiding in public meetings. I have had very little experience in business of this kind; but, without further expressing myself publicly as to my private views, whatever they may be, of the fitness of your choice, I will address myself to the duties of the position in which I am placed, and endeavor to fulfil, as far as is in my power, your expectations.

I shall need your co-operation, and, probably many times, your forbearance. I trust that you will make allowance for my inexperience, and put my efforts down to the best account.

On motion of T. S. VERDI, M.D., of Washington, D.C., a vote of thanks was tendered to the officers of the Institute for the past year, for the efficient and acceptable manner in which they had performed their official duties.

The President announced the following Committee on Credentials:

L. DE V. WILDER, M.D., New York.
J. C. BURGHER, M.D., Pittsburg, Pa.
DAVID THAYER, M.D., Boston.
FRANCIS WOODRUFF, M.D., Ann Arbor, Mich.
T. S. VERDI, M.D., Washington, D.C.

The following were appointed a Committee to audit the Treasurer's accounts: —

A. E. SMALL, M.D., Chicago.
E. C. FRANKLIN, M.D., St. Louis.
G. E. BELCHER, M.D., New York.
SAMUEL GREGG, M.D., Boston.
ROBT. MCMURRAY, M.D., New York.

On motion of A. E. SMALL, M.D., of Chicago, JOHN MOORE, M.D., of Liverpool, Eng., was invited to a seat with the Institute.

The Secretary then read the articles of unfinished business of last year.

DELINQUENT MEMBERS.

N. F. COOKE, M.D., of Chicago: In connection with the Secretary's report, I wish to inquire whether there is any method by which a great many members who have ceased their relations of membership with the Institute — men highly respected and estimable, but who have left us on some misunderstanding, or by reason of inefficiency of some long-ago Secretary — can be reinstated as members of the Institute. I could mention, if

necessary, several men whom we have always felt glad to have with us, who have now gone out of membership simply, I am satisfied, on a technicality. I move that the Secretary be requested to correspond with such, and ascertain their wishes in regard to membership.

THE SECRETARY: I would state that resolutions have been passed at various sessions for the last ten years dismissing members who do not, by a certain time, comply with the regulations of the Institute. Each Secretary has felt a delicacy in enforcing these resolutions, so that some persons have gone ten or fifteen years without paying anything to support the Institute.

At the last session the subject of delinquent members was referred to a special committee, and they have corresponded with all of these delinquent members, and the Secretary has acted under their instructions in omitting certain names from the list of members.

DR. COOKE: If this has been done already, I withdraw my motion.

THE PRESIDENT: I will state, as one of the members of that committee, that a vast amount of correspondence has been conducted during the past year relating to delinquencies and financial discrepancies. So far as possible, these matters have been arranged. But, notwithstanding all that, many, probably from inadvertence, have neglected to comply with the requirements of the Institute, and it is still possible that some very valuable and honored names have been allowed to lapse from our catalogue; but, I am certain, it has been by no fault of the Institute or its officers. Every possible pains has been taken to consult with them, and secure their interest.

RESOLUTIONS OF CONDOLENCE.

DR. COOKE: The members are doubtless aware that our friend, Dr. J. F. Gray, of New York, one of the oldest members of the Institute, has met with an affliction in the loss of his wife;

and, as Mrs. Gray was also related to several of the oldest members of the profession, — a sister of the late Dr. A. Gerald Hull, and of our associate, Dr. A. Cooke Hull, — I desire to present the following resolutions:

Whereas The Institute has learned of the affliction which has befallen our eminent and venerated associate, DR. JOHN F. GRAY, of New York, in the death of his estimable wife; and,

Whereas The late Mrs. Gray was intimately connected by consanguinity and marriage with several of the oldest and ablest members of our profession: therefore,

Resolved, That the American Institute of Homœopathy deeply regrets the death of this excellent lady, and sympathizes with their bereaved friend in his affliction.

Resolved, That the General Secretary be instructed to prepare and transmit a copy of these resolutions to Dr. Gray.

The resolutions were unanimously adopted.

NECROLOGICAL REPORT.

HENRY D. PAINE, M.D.: Perhaps this is the proper place for me to report as necrologist. I have made considerable effort to obtain biographical notices of a large number of deceased members not heretofore properly commemorated in our Transactions; but, so far, have obtained little more than mere promises of future information. Of such as were received and reduced to form, a considerable number were lost in transmission. It seems very desirable that some brief minute should be made upon our records of those deceased members who have taken an active and zealous part in the interests of the Institute.

REMARKS OF DR. MOORE.

JOHN MOORE, M.D., of Liverpool, Eng., was invited to address the Institute, and spoke as follows:

I thank you, Mr. Chairman, for the honor which you have conferred upon me in electing me a temporary member of your

Institute. It was with great delight that I learned, on my arrival in New York, that you were about to have an annual meeting of this Institute. I have no doubt but that I shall receive very much profit and pleasure from my attendance here. I have simply to inform you that I am a homœopathist of twenty years' standing. I take a very great interest in the cause in this country as well as in my native land. I am sorry to say we cannot report any great things; but we are taught by very high authority not to despise the day of small things. Suffice it to say, we have an excellent dispensary in our town, with, at least, four stipendiary physicians. All the doctors of our faith in the town take an interest in it.

For the last four years we have held meetings, presided over by the Mayor. This is considered a great honor with us, and puts us on a level with the allopaths. Homœopathy is growing decidedly in popular favor. The only drawback is that the profession do not come over in proportion to the people. We have places of 10,000, 15,000, or 20,000 inhabitants over the kingdom without any homœopathic practitioners at all. As I say, our great fault is the want of doctors, and not the want of patients. But I will not take up your time while you have such an important docket of business as I see in the papers. I shall take great pleasure in being a listener; and, if anything has occurred in the old slow world of mine that will be worth the hearing, I shall be very happy to tell it. When I was crossing your river last night — that wonderful river of which I have heard so often, and had dreams of in my youth, and since my youth — there was a terrific flash of lightning, and I hope this was only a type of those scintillations that will come forth from the various members gathered from all parts of this vast, mighty, and free country.

REPORT OF THE AUDITING COMMITTEE.

A. E. Small, M.D., Chairman, reported that the committee had examined the Treasurer's account, and found it correct.

They would further report that, from the Treasurer's account, it appears there is a considerable debt, the expenses having been greater than the amount received, by a sum of between three and four hundred dollars; and that the question of raising the annual dues to a sum sufficient to meet this deficiency might be worth considering in the Institute. It is not right or proper

that a national body so important as the American Institute of Homœopathy should be in debt. Measures should be taken to so replenish the treasury that our proceedings can be printed, if they are worth printing, and the debts of the Institute liquidated. (Section I., Art. 11.)

H. M. SMITH, M.D., of New York: In rising to move the adoption of the report of the Auditing Committee, I would state, a little in advance of the report of the Bureau of Organization, that they purpose to suggest a by-law regulating the annual dues of the Institute. We have none as yet, and raise money only by resolutions. It may be a proper time, when this report has been adopted, to broach the subject of the appointment of a Committee on Finance.

The report was adopted.

APPOINTMENT OF A COMMITTEE ON FINANCE.

H. M. SMITH, M.D., moved the appointment of a Committee on Finance. He said: In the early years of the Institute, when we numbered a hundred and fifty or two hundred members, when we had committees consisting of a single member appointed to report on scientific subjects, our expenses were very much less than at present. Instead of a volume of Transactions of the size and value of the present one, we had a small one of one or two hundred pages. It was then well enough that we should get along with as simple an organization as possible.

We are now increasing rapidly in numbers, and are becoming, if we have not already become, the largest medical organization in the country, as we were the first of a national character. We are also getting to be (thanks to our Committee on Correspondence) a universal medical organization, and it is proper that we should duly consider the subject of finances. As our Bureaus are appointed, they have power to draw on the treasury for their expenses, such as stationery, printing, postage, etc. Our Committee on Correspondence have expenses which the

individual members should not bear. And, as the Institute becomes more extensive and active, its expenses will be increased. I may, in advance, state that the Bureau of Organization will submit a by-law assessing each member the annual sum of five dollars. My object at present is to move that a committee of five be appointed to take into consideration the finances of the Institute, and devise some plan whereby it may obtain funds with which to carry on its labors in the most efficient manner.

F. R. McManus, M.D., of Baltimore, asked how many paying members we have now.

The Treasurer: There are 543 members on the list, 100 of whom are delinquent, some for one, two, and three years.

The motion for a Committee on Finance was agreed to, and the chair appointed the Committee, as follows:

H. M. Smith, M.D., New York.
E. B. Thomas, M.D., Cincinnati.
E. M. Kellogg, M.D., New York.
I. T. Talbot, M.D., Boston.
W. Williamson, M.D., Philadelphia.

T. S. Verdi, M.D., of Washington, from the Committee on Foreign Correspondence, presented a report, which was accepted and referred. (Section VI., Art. 6.)

REPORT OF THE COMMITTEE ON CREDENTIALS.

David Thayer, M.D., of the Committee, reported that *thirteen* State societies, *twenty-two* local or county societies, *fifteen* hospitals, *eighteen* dispensaries, *nine* colleges, and *ten* medical journals, — in all, *eighty-seven* homœopathic institutions, — were represented by *one hundred and twenty-three* delegates, as follows:

STATE SOCIETIES.

Western Institute of Homœopathy.

J. P. DAKE, M.D. G. D. BEEBE, M.D.

Maine Homœopathic Medical Society.

W. E. PAYNE, M.D. G. H. MORRILL, M.D.

New Hampshire Homœopathic Medical Society.

JOSHUA F. WHITTLE, M.D. E. CUSTER, M.D.

Vermont Homœopathic Medical Society.

G. E. E. SPARHAWK, M.D. C. B. CURRIER, M.D.
J. H. JONES, M.D.

Massachusetts Homœopathic Medical Society.

SAMUEL GREGG, M.D. M. FULLER, M.D.
GEO. RUSSELL, M.D. DAVID THAYER, M.D.
I. T. TALBOT, M.D. H. L. CHASE, M.D.
C. WESSELHOEFT, M.D. H. B. CLARKE, M.D.
G. W. SWAZEY, M.D.

Connecticut Homœopathic Medical Society.

C. H. SKIFF, M.D. C. C. FOOTE, M.D.
C. E. SANFORD, M.D.

Homœopathic Medical Society of the State of New York.

J. BEAKLEY, M.D. G. E. BELCHER, M.D.
E. M. KELLOGG, M.D. H. M. SMITH, M.D.
H. D. PAINE, M.D. T. F. ALLEN, M.D.
R. MCMURRAY, M.D. A. S. BALL, M.D.

Homœopathic Medical Society of the State of New Jersey.

J. J. YOULIN, M.D.

Homœopathic Medical Society of the State of Pennsylvania.

M. CÔTÉ, M.D. J. C. BURGHER, M.D.
J. C. MORGAN, M.D. R. C. SMEDLEY, M.D.
J. E. JAMES, M.D.

Ohio Homœopathic Medical Society.

E. B. THOMAS, M.D.

Michigan Homœopathic Institute.

E. H. DRAKE, M.D. E. A. LODGE, M.D.
W. J. CALVERT, M.D. P. H. HALE, M.D.

Homœopathic Institute of the State of Indiana.

O. P. BAER, M.D. WM. EGGERT, M.D.

J. T. BOYD, M.D.

Illinois State Homœopathic Medical Association.

G. D. BEEBE, M.D. G. S. BARROW, M.D.

D. S. SMITH, M.D. F. L. VINCENT, M.D.

R. LUDLAM, M.D. L. E. OBER, M.D.

J. S. MITCHELL, M.D.

LOCAL OR COUNTY SOCIETIES.

Central Homœopathic Medical Association of Maine.

JAMES B. BELL, M.D.

Boston Academy of Homœopathic Medicine.

L. D. PACKARD, M.D.

Bristol County (Mass.) Homœopathic Medical Society.

H. B. CLARKE, M.D.

Worcester County (Mass.) Homœopathic Medical Society.

L. B. NICHOLS, M.D.

Central New York Homœopathic Medical Society.

C. W. BOYCE, M.D.

Dutchess County (N. Y.) Homœopathic Medical Society.

H. N. AVERY, M.D.

Dutchess Co. (N. Y.) Homœopathic Medical Society's Mutual Improvement Association.

HENRY N. AVERY, M.D.

Erie County (N. Y.) Homœopathic Medical Society.

L. M. KENYON, M.D.

King's County (N. Y.) Homœopathic Medical Society.

J. L. KEEP, M.D.

Homœopathic Medical Society of the County of New York.

G. E. BELCHER, M.D.

Ulster County (N. Y.) Homœopathic Medical Society.

F. W. INGALLS, M.D.

Homœopathic Medical Association for the Eastern District of New Jersey.

S. B. TOMPKINS, M.D.

Homœopathic Medical Society of Allegheny County, Pa.
J. C. BURGHER, M.D.

Homœopathic Medical Society of Chester and Delaware Counties, Pa.
R. C. SMEDLEY, M.D.

Cumberland Valley (Pa.) Homœopathic Medical Society.
J. H. MARSDEN, M.D.

Homœopathic Medical Society of Philadelphia County, Pa.
J. E. JAMES, M.D.

Cincinnati Homœopathic Medical Society.
J. H. PULTE, M.D.

Cuyahoga County (Ohio) Homœopathic Medical Association.
J. P. DAKE, M.D.

Hahnemannian Society of Cleveland Homœopathic College.
H. H. BAXTER, M.D.

Homœopathic Society of the 17th Congressional District of the State of Ohio.
R. B. RUSH, M.D.

Cook County (Ill.) Homœopathic Medical Society.
R. LUDLAM, M.D.

St. Louis Homœopathic Medical Society.
J. T. TEMPLE, M.D.

HOSPITALS, ASYLUMS, ETC.

Consumptives' Home, Boston.
C. CULLIS, M.D.

House of the Angel Guardian, Boston.
H. P. SHATTUCK, M.D.

Little Wanderers' Home, Boston.
O. S. SANDERS, M.D.

Five Points House of Industry, New York.
B. F. JOSLIN, M.D.

Home for Friendless, New York.
C. T. LIEBOLD, M.D.

New York Homœopathic Hospital.
H. M. SMITH, M.D.

New York Ophthalmic Hospital.
T. F. ALLEN, M.D.

Protestant Half Orphan Asylum, New York.
B. F. BOWERS, M.D.

Orphan Asylum, Newark, N. J.
S. B. TOMPKINS, M.D.

Little Wanderers' Home, Philadelphia.
H. N. MARTIN, M.D.

Hospital of the Homœopathic Medical College of Pennsylvania.
H. N. GUERNSEY, M.D.

Homœopathic Hospital and Dispensary of Pittsburg, Pa.
M. CÔTÈ, M.D.

Cleveland Homœopathic Hospital.
T. P. WILSON, M.D.

Chicago Nursery.
S. P. HEDGES, M.D.

Good Samaritan Hospital, St. Louis.
T. G. COMSTOCK, M.D.

DISPENSARIES.

Consumptives' Home Dispensary, Boston.
G. M. PEASE, M.D.

Homœopathic Medical Dispensary, Boston.
G. RUSSELL, M.D.

Bond Street (N. Y.) Homœopathic Dispensary.
OTTO FÜLLGRAFF, M.D.

New York Homœopathic Dispensary.
R. MCMURRAY, M.D.

Brooklyn Homœopathic Dispensary.
J. L. KEEP, M.D.

Gates Avenue (Brooklyn) Homœopathic Dispensary.
J. L. KEEP, M.D.

Buffalo Homœopathic Dispensary.
L. M. KENYON, M.D.

Poughkeepsie (N. Y.) Homœopathic Medical and Surgical Dispensary.
H. N. AVERY, M.D.

Newark (N. J.) Homœopathic Dispensary.
J. J. YOULIN, M.D.

Dispensary of the Homœopathic Medical College of Pennsylvania.
H. N. GUERNSEY, M.D.

Eye and Ear Infirmary of the Homœopathic College of Pennsylvania.
M. MACFARLAN, M.D.

Hahnemann Medical College (Pa.) Dispensary.
J. C. MORGAN, M.D.

South West Homœopathic Dispensary of Philadelphia.
C. J. WILTBANK, M.D.

Washington Homœopathic Dispensary.
T. S. VERDI M.D.

Hahnemann Medical College Dispensary, Chicago.
R. LUDLAM, M.D.

West Division Homœopathic Dispensary, Chicago.
T. C. DUNCAN, M.D.

St. Louis Homœopathic Dispensary.
E. C. FRANKLIN, M.D.

Homœopathic Free Dispensary of Leavenworth.
MARTIN MAYER, M.D.

COLLEGES.

New England Homœopathic Medical College.
DAVID THAYER, M.D.

New York Homœopathic Medical College.
J. BEAKLEY, M.D.

Hahnemann Medical College of Philadelphia.
JOHN C. MORGAN, M.D.

Homœopathic Medical College of Pennsylvania.
R. A. PHELAN, M.D.

Medical Department of the Michigan University.
C. J. HEMPEL, M.D.

Cleveland Homœopathic College.
T. P. WILSON, M.D.

Hahnemann Medical College of Chicago.
A. E. SMALL, M.D.

Homœopathic Medical College of Missouri.
E. C. FRANKLIN, M.D.

Dix Homœopathic Medical College.
S. B. PARSONS, M.D.

JOURNALS.

New England Medical Gazette.
H. C. ANGELL, M.D.

North-American Journal of Homœopathy.
F. W. HUNT, M.D.

American Journal of Homœopathic Materia Medica.
J. C. MORGAN, M.D.

Hahnemannian Monthly.
T. MOORE, M.D.

American Homœopathist.
E. B. THOMAS, M.D.

Ohio Medical and Surgical Reporter.
T. P. WILSON, M.D.

American Homœopathic Observer.
E. A. LODGE, M.D.

U. S. Medical and Surgical Journal.
G. E. SHIPMAN, M.D.

Medical Investigator.
T. C. DUNCAN, M.D.

Western Homœopathic Observer
W. T. HELMUTH, M.D.

J. P. DAKE, M.D., Chairman of the Board of Censors, reported the following persons as eligible for membership, and they were accordingly elected:

SAMUEL ALVORD, M.D.,	Chicopee Falls, Mass.
EDWIN P. ANGELL, M.D.,	Galveston, Texas.
THEODORE BACMEISTER, M.D.,	Toulon, Ill.
WILLIAM P. BAIRD, M.D.,	Boston, Mass.
WALTON BANCROFT, M.D.,	La Salle, Ill.
GEORGE S. BARROWS, M.D.,	Rockford, Ill.
H. H. BAXTER, M.D.,	Newark, Ohio.
JAMES B. BELL, M.D.,	Augusta, Maine.
HAMILTON F. BIGGAR, M.D.,	Cleveland, Ohio.
BENNETT J. BRISTOL, M.D.,	Webster Groves, Mo.
JOHN C. BUDLONG, M.D.,	Centre Dale, R.I.
J. GREGG BURCHARD, M.D.,	Peekskill, N.Y.
GEORGE F. BUTMAN, M.D.,	Boston, Mass.
WILLIAM J. CALVERT, M.D.,	Ann Arbor, Mich.
HENRY S. CHASE, M.D.,	St. Louis, Mo.
F. A. W. DAVIS, M.D.,	Natchez, Miss.
HERBERT M. DAYFOOT, M.D.,	Mount Morris, N. Y.
CHARLES R. DORAN, M.D.,	Hagerstown, Md.
WILLIAM EGGERT, M.D.,	Indianapolis, Ind.
EDWIN W. FINCH, M.D.,	New Rochelle, N. Y.
JACOB H. GALLINGER, M.D.,	Concord, N. H.
J. PAUL GARVIN, M.D.,	Alton, Ill.
CHARLES H. GUNDERLACH, M.D.,	St. Louis.
STEPHEN HASBROUCK, M.D.,	New York.
S. P. HEDGES, M.D.,	Chicago, Ill.
W. C. F. HEMPSTEAD, M.D.,	Virden, Ill.
DAVID HUNT, JR., M.D.,	Worcester, Mass.
SAMUEL P. HUNT, M.D.,	Augusta, Ga.
A. O. HUNTER, M.D.,	Alliance, Ohio.
WALTER M. JACKSON, M.D.,	Chicago, Ill.
P. E. JOHNSON, M.D.,	Alton, Ill.
S. A. JONES, M.D.,	Englewood, N. J.
RICHARD KOCH, M.D.,	Philadelphia, Pa.
GEORGE LOELKES, M.D.,	Belleville, Ill.
FREDÉRIC A. LORD, M.D.,	Chicago, Ill.
EDWARD M. P. LUDLAM, M.D.,	Chicago, Ill.
D. R. LUYTIES, M.D.,	St. Louis.
MALCOLM MACFARLAN, M.D.,	Philadelphia, Pa.
O. H. MANN, M.D.,	Evanston, Ill.

HENRY N. MARTIN, M.D., . . .	Philadelphia, Pa.
MARTIN MAYER, M.D., . . .	Leavenworth, Kan.
GEORGE B. I. MITCHELL, M.D., .	New York.
G. H. MORRILL, M.D., . . .	Augusta, Maine.
CHARLES H. NIBELUNG, M.D., . .	St. Louis, Mo.
LIBERTY D. PACKARD, M.D., . .	South Boston, Mass.
SCOTT B. PARSONS, M.D., . . .	St. Louis, Mo.
G. M. PEASE, M.D., ...	Boston, Mass.
EDWIN H. PECK, M.D., . . .	Vincennes, Ind.
R. A. PHELAN, M.D., ...	St. Louis, Mo.
N. SCHNEIDER, M.D., ...	Cleveland, Ohio.
GEORGE N. SEIDLITZ, M.D., . .	Keokuk, Iowa.
ALVIN E. SMALL, JR., M.D., . .	Chicago, Ill.
HENRY N. SMALL, M.D., . . .	Chicago, Ill.
D. E. SOUTHWICK, M.D., . . .	Ogdensburg, N. Y.
A. F. SQUIER, M.D., ...	Boston, Mass.
JOHN T. TEMPLE, M.D. . . .	St. Louis, Mo.
GEORGE N. TIBBLES, M.D., . .	Hudson City, N. J.
N. D. TIRRELL, M.D., . . .	St. Louis, Mo.
CHARLES VASTINE, M.D., . . .	St. Louis, Mo.
THOMAS J. VASTINE, M.D., . .	St. Louis, Mo.
SAMUEL C. WHITING, M.D. . .	Vincennes, Ind.
JARVIS U. WOODS, M.D. . . .	Nashua, N. H.
D. G. WOODVINE, M.D., . . .	Boston. Mass.

The report of the Committee on Medical Education being called for, D. S. SMITH M.D., of Chicago, said that, though he was a member of the committee, he was not aware that any report had been prepared. Another member of the committee, Dr. Walker, was in the city, and perhaps would furnish a report during the session.

After some desultory discussion upon the importance of the subject, it was voted that the report of this committee should be made the first business of the afternoon session.

On motion, adjourned to two o'clock, P.M.

AFTERNOON SESSION.

The Institute met at two o'clock, P.M.

THE PRESIDENT called for the report of the Committee on Medical Education.

DR. D. S. SMITH said he had not had an opportunity of seeing Dr. Walker, and was without any report. He moved that the committee be discharged.

The motion was agreed to.

D. THAYER, M.D., of Boston, moved that another committee of five be appointed to report on the subject of education at the next annual meeting.

P. P. WELLS, M.D., of New York: I would like to inquire of the gentleman what particular object he has in offering this resolution? What special matter does he propose to bring before the Institute as a result? I see no great good likely to result from a report of a committee on that subject. For years and years, it has amounted simply to a reiteration of platitudes in regard to the importance of more full and complete education, — which we all knew at the start. If there are any new ideas to be brought forward, it would be well worth the while; otherwise, what is the use? There will be so much time occupied by-and-by with no result.

F. R. MCMANUS, M.D., of Baltimore: If this is to be made a matter of further consideration, would it not be well to continue the old committee? I offer as amendment that the old committee be continued.

E. C. FRANKLIN, M.D., of St. Louis: I am not prepared to make any report myself, but I intended to make some remarks in reference to the subject of education. I wished to have new names substituted for those of absentees, in hopes that Dr. Walker would arrange some report, his being the second name on the committee. I have no doubt he has prepared some report or synop-

sis of a report that will be presented to the Institute before the session closes.

Dr. McManus withdrew his amendment.

Dr. Thayer's motion for the appointment of a new committee was agreed to. The chair appointed on the committee the following persons:

C. J. Hempel, M.D., of Grand Rapids, Mich.
D. S. Smith, M.D., of Chicago.
T. G. Comstock, M.D., of St. Louis.
H. B. Clarke, M.D., of New Bedford.
G. D. Beebe, M.D., of Chicago.

BUREAU OF MATERIA MEDICA, PHARMACY, AND PROVINGS.

The Secretary presented the report of this Bureau, accompanied by the following papers:

Lilium Tigrinum, by William E. Payne, M.D. — (Section II. Art. 5.)

Iris Versicolor, by C. Wesselhoeft, M.D.— (Section II., Art. 6.)

Ptelea Trifoliata, by E. M. Hale, M.D. — (Section II., Art. 7.)

Materia Medica and Therapeutics, by W. Williamson, M.D. — (Section II., Art. 8.)

History of the Materia Medica, by S. B. Barlow, M.D.—(Section II., Art. 9.)

The report, with accompanying papers, was accepted, and referred to the Committee on Publication.

On motion of Dr. McManus, the Chair appointed the following persons a Committee on Nomenclature of Drugs, as requested by Dr. Williamson:

W. Williamson, M.D., Philadelphia.
C. Hering, M.D., Philadelphia.
C. Neidhard, M.D., Philadelphia.
Jacob Jeanes, M.D., Philadelphia.
F. E. Boericke, M.D., Philadelphia.

J. C. Morgan, M.D., of Philadelphia: I am not a member of this Bureau, but I have been for some time engaged on a scientific classification of the materia medica. I have here a paper,

accompanied with diagrams illustrating my views of the classification of medicines. I shall be happy to explain it to the Institute, and I leave it to the judgment of others whether to have it embodied with the report on the materia medica.

DR. THAYER moved that Dr. Morgan be requested to exhibit his diagrams, and read his paper. The motion was agreed to, and the paper was read.

C. J. HEMPEL, M.D : I would like very much to have a chance to study this a little better. These ideas are so novel, and the classifications presented in this paper so entirely different from anything we have had heretofore, that I am very anxious to see this a little more clearly; and I should like, therefore, to have it in print. Though I have studied materia medica considerably, I confess this paper has completely surprised me. I should not like to have anything done, however, which would hold the Institute responsible for any views that this paper expresses.

THE PRESIDENT: That, I believe, is generally understood.

DR. THAYER: I have been so much pleased with what has been read, and with the explanations given, that I also would like to see it in print; and I move that it be accepted, and referred to the Committee on Publication.

R. MCMURRAY, M.D.: I wish to ask what would be the effect of the motion to accept this paper?

THE PRESIDENT: It simply puts it into the possession of the Institute.

DR. MCMURRAY: Does Dr. Morgan propose to leave it there? He may want to use it for his own purposes. It may be proper to pass a vote of thanks for the favor of hearing it, but whether it is to belong to the Institute is another question.

DR. MORGAN: I wish to say that I have presented it here with a good deal of hesitation and diffidence. I know that I am presenting views which must undoubtedly conflict with those of many gentlemen whose opinions I highly respect, and I therefore would not urge the paper upon the attention of the Insti-

tute. My desire, if I know myself, is, more than anything else, to do good with the product of my mind. If the Institute really think that it will be of any use to the profession, I shall be very happy to submit it to their service.

Dr. Morgan's paper was accepted, and referred to the Committee on Publication.*

BUREAU OF ORGANIZATION, REGISTRATION, AND STATISTICS.

HENRY M. SMITH, M.D., of New York, Chairman of the Bureau, presented a report, which was accepted. — (Section VI., Art. 5.)

On motion of Dr. Beebe, the recommendations of the Bureau were laid upon the table.

The report was accompanied by several reports from homœopathic institutions, which were received, and referred to the Committee on Publication. — (Section VI., Art. 8.)

T. F. ALLEN, M.D., of New York, one of the surgeons of the New York Ophthalmic Hospital, was invited to give a verbal report of that institution, which had recently changed from allopathic to homœopathic care. (Section VI., Art. 8.)

He briefly detailed the manner in which this change was accomplished, which was after the discovery that a large majority of the trustees were homœopaths. For the report of the Institution, see the "New York Ophthalmic Hospital" (Section VI., Art 8.)

C. J. HEMPEL, M.D., of Grand Rapids, Mich.: From Dr. Allen's report, I see he wants to get our public institutions into the hands of homœopaths by converting the trustees. That is precisely what we are doing in the State of Michigan. We have converted six out of eight of the Board of Regents of our State University, and I trust the consequence will be that the whole University will ultimately fall into our hands. It is in a fair way of doing so.

* The paper was never received by the Publication Committee. It may be found in the Transactions of the New York Homœopathic Medical Society for 1868.

Dr. FRANKLIN: I propose to offer the following resolutions, for which I do not think there could be a more appropriate time than the present:

Resolved, That this Institute views with feelings of pleasure and satisfaction the position of homœopathy in the University of the State of Michigan, as represented by Prof. C. J. Hempel.

Resolved, That this Institute indorses and approves the action of the Regents of the Michigan University in appointing Dr. Hempel to a Professorship in said University.

After reciting the history of the struggle (Section VI., Article 8, Report of Michigan Homœopathic Institute), he added: I would like to have these resolutions passed simply to strengthen the hands of the Regents, who have thus boldly stepped out in defiance of the displeasure of the allopaths who have been formerly connected with the institution. I fear that, if any amendments are brought before us, they may so far mutilate the resolutions that they will fail to attain the ends to which I aim in offering them. I trust, if any are offered, that they will tend further to strengthen the position of our friends, and enable Prof. Hempel to go on in the University as he has begun.

G. D. BEEBE, M.D., of Chicago: I heartily second everything that Dr. Franklin has said: still, I must say that all wishes for the success of the Michigan University are not centered in my friend, Dr. Franklin, nor are they all embodied in the resolutions presented by him. I therefore offer, as an amendment, the following substitute:

Whereas The members of this Institute have watched with profound interest the progress of the controversy with reference to the teaching of homœopathy in the Michigan University; and

Whereas The exclusion of such teaching has been in violation of the laws of the State of Michigan, and the expressed will of the people: therefore, as the sense of the homœopathic profession here represented, be it

Resolved, That the interests of homœopathy and the welfare of the community demand that the principles of homœopathy shall be taught in the

University of Michigan, at Ann Arbor, and that difference of opinions among members of the two schools of medicine ought not to operate to the exclusion of either from a university founded and sustained by the people for a general diffusion of knowledge.

***Resolved*, That, should any or all of the allopathic chairs of the medical department of the said university be vacated, and the Board of Regents see fit to appoint homœopathic medical men to fill these chairs, the homœopathic profession of America will pledge its influence and support to the medical department of that university in sustaining such action.**

Now, the resolutions of Dr. Franklin do not quite express the sympathy that we feel for the institution. I have had a prolonged interview with one of the Regents, and he has expressed his preference for more homœopathic professors than have already been appointed. Six of the Regents are strong homœopaths; and, if they can feel assured of the support of the public in placing the medical department under homœopathic teaching, then the time will speedily come when all the medical teaching there will be homœopathic. But the Regents fear lest, the teachers of the allopathic school being suddenly withdrawn, their benches will be empty, the department will dwindle down to an insignificant number, and the institution suffer materially. What the Regents need, then, is something to support them in this movement,— some assurance that the homœopathic public will so sustain them that, if they lose seven hundred allopathic students, they will get in their place a reasonable number of homœopaths. I think, if we can agree to pledge the homœopathic profession of America to support the institution under a homœopathic regime, we shall not have long to wait for this happy change.

Dr. FRANKLIN: There is a controversy now going on between the Regents and the competent authorities, with which the Institute should not interfere. The Regents want to know if the Institute approves their acts. Now, the wider extent of the amended resolutions and the amount of matter embraced have almost entirely swallowed up my original resolutions, and they

really cover no further ground. The questions of law are for the Regents to settle, and not the Institute. We approve and indorse the action of the Regents in their legal fight over this question. Now, if the gentleman says, "We pledge ourselves to sustain you," I am perfectly willing; but it strikes me that, outside of this, the series of resolutions travels over ground to which we really have no right.

D. S. SMITH, M.D., of Chicago: I rise to second the amendment offered by Dr. Beebe. The remarks of my friend, Prof. Franklin, seem to me to make it more necessary that an amendment of this kind should go with his.

J. C. MORGAN, M.D., of Philadelphia: I am afraid the very clause which Prof. Franklin is willing to admit as a part of his resolutions is one that requires more discussion than any other. Pledging ourselves to sustain any school whatever, is a very serious matter. It might possibly be best that all our colleges should be merged into that one; and, if it is the wish of the profession, I, as the representative of one college, would not object: but I think it should first be well considered.

A. E. SMALL, M.D., of Chicago: I have watched with a great deal of interest the course that has been taken in complying with the law of Michigan in providing for a chair of homœopathy in this university. I think it is important that this Institute should indorse the efforts to carry out the provisions of that law, and for this reason: it is the first legal recognition of homœopathy coming from the people in this vast country. I mean not to insinuate that the homœopathic colleges which have been chartered are not legal institutions, and legally authorized to confer the degree of Doctor of Medicine; nor to undervalue private colleges that have been established by unincorporated bodies. But here is an institution that is sustained by the public, — by a tax upon the property, and by endowments in the State of Michigan. The Legislature has established in it this

chair of homœopathy. It is sustained by the voice of the people; and therefore I think that this Institute should pass the resolutions. I am satisfied that the time will come when a majority of the people of this vast country will unite in sustaining institutions of this kind. We hail the beginning, and it seems to me that nothing can be more appropriate than that this Institute should adopt the resolutions offered by Dr. Franklin and amended by Dr. Beebe.

J. P. DAKE, M.D., of Salem, Ohio: I move that these resolutions be referred to a special committee of three, for further consideration.

DR. FRANKLIN: To save time, I accept Dr. Beebe's resolutions as a substitute for mine.

I. T. TALBOT, M.D., of Boston: There are some ideas in one series of resolutions which are not contained in the other. I second Dr. Dake's motion, and would suggest that Drs. Franklin and Beebe be appointed on that committee, that they may combine these resolutions, and put them in the strongest and most emphatic form for presentation to-morrow.

J. BEAKLEY, M.D., of New York: The resolutions of Dr. Franklin, if I have understood them aright, tend to reflect credit upon the acts of Dr. Hempel in sustaining the homœopathic cause in that school. Of this I heartily approve. No man is deserving of higher commendation than Dr. Hempel for the noble efforts made in behalf of homœopathy in that school; but the resolution of Dr. Beebe promises what we cannot and will not literally perform. He pledges that this Institute will give its support. If it means moral support, it is all right; but, if pecuniary and individual support be meant, it will not be given, because we have institutions in other States to which we must give our individual financial and moral support. Therefore, if this Institute pledges other than moral support to that school, it pledges that which it will not give, and cannot, without injustice to colleges already established.

The motion was carried, and the resolutions were referred to Drs. Franklin, Beebe, and Morgan.

Dr. Franklin asked permission to explain a surgical case which had come under his treatment. (Section V., Art 12.)

The Institute then adjourned till 8 o'clock, P.M.

Evening Session.

In the evening, at eight o'clock, the members reassembled in public meeting. The President called the Institute to order, and introduced Henry B. Clarke, M.D., of New Bedford, Mass., who delivered the annual address. (Section I., Art. 10.)

Upon the conclusion of the address, Wm. Tod Helmuth, M.D. of St Louis, offered the following:

Resolved, That the thanks of the Institute be tendered to Dr. Clarke for his able and interesting address, and the happy manner in which he has combined the professional and popular ideas of homœopathy; and that a copy of the address be requested for publication.

The resolution was unanimously adopted.

The Institute then adjourned till Thursday at ten, A.M.

SECOND DAY.

Morning Session.

The Institute met on Thursday morning, at ten, A.M.

MICHIGAN UNIVERSITY.

G. D. Beebe, M.D., from the Committee on Michigan University, reported as follows:

A majority of the committee, consisting of Dr. Franklin and myself, have agreed upon the following report:

Whereas The members of this Institute have watched with peculiar interest the progress of the controversy with reference to the teaching of homœopathy in the Michigan University at Ann Arbor; and

Whereas The withholding of such teaching has been in violation of the laws of the State of Michigan, and of the expressed will of the people, — therefore, as the sense of the homœopathic profession here represented,

Resolved, That the interests of homœopathy, and the welfare of the community, demand that the principles of homœopathy shall be taught in the University of Michigan, at Ann Arbor, and that difference of opinion among members of the two schools of medicine ought not to operate to the exclusion of either from a university founded and sustained by the people for the general diffusion of knowledge.

Resolved, That the action of the Board of Regents, in appointing Professor C. J. Hempel to the Chair of Homœopathy in the University of Michigan, receives the hearty and unqualified approval of this Institute.

Resolved, That, should any or all of the allopathic chairs of the medical department of said University be vacated, and the Board of Regents see fit to appoint homœopathic medical men to fill these chairs, the homœopathic profession of America will pledge its influence to the medical department of that University in sustaining such action.

Dr. Beebe continued: It may perhaps be proper for me to make a few statements in further explanation of the tenor of these resolutions.

For the last twenty years, the Legislature of Michigan has been strongly homœopathic, and it has been urged upon them to pass some law admitting homœopathic professors to the university. Fifteen years ago, after a good deal of effort by some members of our profession in Michigan, a law was passed by the Legislature, not merely permitting homœopathy in the university, but commanding its admission. The law was mandatory in its provisions, saying that the Regents should have power to appoint and remove professors over all the departments of the university, and fix their compensations, provided that there should always be at least one professor of homœopathy in the

medical department. This law the Regents hardly dared to execute, fearing that, if they introduced homœopathic teachers, the allopathic professors would withdraw, and the school would be broken up from lack of support. In this state of mind, the Regents have hesitated, and this hesitation has been constantly kept up by the agitation on the part of the allopathic professors and the allopathic profession of that State. Efforts were made to reach the Supreme Court of the State, and secure a *mandamus* to compel the Regents to fill this chair, but a technicality provided that the Attorney-General must make a complaint, before the *mandamus* could be obtained; and he, not feeling disposed to favor homœopathy, would not enter a complaint: and so some years passed without action being taken. Of late the Attorney-General is inclined to favor the homœopathic side, and has made a complaint to the Supreme Court, and that court is now considering a motion for the issue of a *mandamus*.

In the mean time the Regents, feeling the law closing down upon them, and that the courts were going to force them into this measure, sought to effect a compromise by the appointment of a homœopathic professor, and locating a homœopathic branch of the school somewhere else than at Ann Arbor.

While all this was going forward, an offer was made by the friends of the university to raise a tax of one-twentieth of a mill upon all the taxable property of the State for the support of the university. This offer was opposed by some of the friends of homœopathy. A protest was made that no more funds should be appropriated to the support of this school until this law was complied with in good faith, and a professor of homœopathy appointed; and so the friends of homœopathy in the Legislature attached to this law a provision that none of the funds thus raised should be paid over to the university until the chair of homœopathy was filled in good faith. Then followed this action to have elsewhere a pocket school for

homœopathy; and then the Regents proceeded to claim this fund of $15,000 or $20,000 thus raised, which the Treasurer refused to pay until the law was complied with. Thus the Regents are brought to a stand-still at this point. The Regents desire, as earnestly as the friends of homœopathy can, that this whole question of law shall be settled. This Board of Regents, all except two of whom are homœopaths, are very anxious to have the support of the courts of the State, and it is to be hoped that the Supreme Court will decide upon this matter during the present month.

Now, sir, a word as to the facilities offered by this school of medicine. Here is a medical school founded by a public tax upon the people of Michigan. A splendid building has been erected, than which probably there is no better in the United States. A museum has been accumulating for twenty-five years, and no expense has been spared to make it the most complete and splendid collection in the United States. Every facility is offered for the administration of every department of medicine and the collateral sciences, from papier-maché models to the latest improved instruments for the illustration of the mechanical departments of medicine. I suppose it may be safely stated that nowhere in the United States are as good facilities offered for the illustration or teaching of medicine in all its departments as are presented in this university.

Now, sir, the crowning feature of it all is that this school is free, and open to the public from all States of the Union: and young men are invited to come and receive instruction free of all cost; the State paying the bills, except the matriculation fee, — a small item, hardly worth considering. The State designs to furnish the very best facilities for medical education that can be had.

Now, here is the first and only instance on this continent where the people have come up through their legislative department and said, " We will educate homœopathic physicians free of

expense, for the benefit of the race." Shall we, then, support these men? Shall we say to these Regents, "Gentlemen, you have the cordial and hearty support of the homœopathic profession of America in carrying out this grand movement in medical progress"?

I am a member of the faculty of one of our homœopathic schools. There are other schools as creditable as the one to which I am attached. They are all doing a good work, and have done a noble work. The work that these schools have accomplished has been the stepping-stone to reach that position where the people will say, "We will pay the bills for educating these men." They have done very much towards bringing before this nation the importance of well-educated, thoroughly accomplished homœopathic practioners.

Now, if it should be necessary, in order to support this institution, that the school at Chicago should be closed, and our whole class sent there to help replace those that now fill those benches, so far as my individual opinion is concerned, I should most heartily concur in such a course. I would with pleasure lay down my note-book, and never deliver another medical lecture, if I could but feel that for the future there would be a place where our students could go, and receive the very highest degree of qualification and instruction.

But, sir, it may not be deemed best to close these other schools. We are met perhaps by the objection that legislation is a little uncertain; that the Board of Regents may change their opinions; that by and by we may find that we are again dispossessed of our position in this school, and also, it may be, left without our other schools. We can only point to our record for the last twenty years. For twenty years the Legislature of the State of Michigan has been strongly homœopathic. The Regents, for the last fifteen years at least, have been homœopathic; and it is fair to presume that the masses in the State of Michigan, who have been loyal to homœopathy for so many years

back, will continue to be loyal. And, if we can fill the medical chairs of that University with men who are competent to conduct the departments with as much ability and skill as has been shown by the opposite school, we shall have no cause to fear that we shall ever be displaced from the institution.

There are many minor points in the history of this controversy, reaching back through twenty years, that would be interesting, perhaps, but they would occupy too much of your time. If any of these resolutions will excite debate, it is perhaps the third.

I do not think that the pledge which it contains is too much. I do not think this commits us to any positive action that need be regarded as objectionable. It means that we will, so far as we can, consistently with engagements elsewhere, give direction to medical students, favoring their attending that school, where the facilities are offered free of expense. I do not claim that the Institute can compel the professors of the Philadelphia, New York, or St. Louis schools to close their doors, and advise their students to leave and go to Ann Arbor; but the profession at large may say, "Here is an institution of grand proportions, of solid foundation, of superior merit; and we recommend you to go there and receive education." I do not think that we can dictate to the different members of the Institute what they themselves shall say or do in support of this institution; but we may all of us, so far as we can, consistently with other obligations, give our influence to its support.

Now, there is one clause in the first resolution to which I would like to call the attention of the Institute. It sets forth that the difference of opinions among the members of the two schools of medicine ought not to operate to the exclusion of either from the university.

It will be remembered that the strongest charge made against the allopathic fraternity is that they are bigoted and exclusive. They will not permit the test of homœopathic practice

on an equal footing with their own in hospitals. They will not admit a homœopathic professor into the University at Ann Arbor. Rather than meet him there on equal footing, they will resign, and abandon the institution. This spirit of intolerance has brought down upon the faculty the frown of the people. No sentiment can be uttered by the homœopathic profession that will win the confidence and sympathy of the people at large more than to say, "We are willing to meet the other school, and teach the principles of our system side by side with the principles — if there are principles — of allopathy." Where the people come up and pay the bills, they have a right to choose which system shall be taught in their university. I am tolerably well satisfied that, if homœopathy is taught there, the allopathic system will shun the light, and probably leave the school; but the blame of that belongs to them. We are willing to meet them anywhere and at all times. I trust, Mr. President, that this resolution may receive a favorable consideration.

F. R. McManus, M.D., of Baltimore: In view of all the facts that Dr. Beebe has stated so lucidly, and the additional consideration that they have selected for a teacher in the first chair a very distinguished member of our society, there can be no possible objection to these resolutions, and I therefore call for the question.

Dr. Morgan: As the majority of the committee have struck out the objectionable words pledging, in so many words, our support, to the Ann Arbor school, I withdraw all objection and wish to second the motion for adoption.

Dr. Thayer: I may say I believe I express the sentiments of almost every gentleman present when I say I admire the feelings which have prompted these resolutions, coming, as they do, from the professors in three homœopathic medical schools. I would say that Massachusetts in her General Court has granted a charter for a homœopathic medical school in that State, but I have no doubt it would be the unanimous voice of the

homœopaths of Massachusetts to heartily concur in these resolutions.

R. LUDLAM, M.D. of Chicago: I have nothing to say except in hearty approval of the report. The only omission in the resolutions seems to be that of a recommendation that the members of the old faculties be allowed to go there, and hear a course of lectures.

R. A. PHELAN, M.D. of Philadelphia: I think there are two features connected with the resolutions, for which I cannot vote. One is that "difference of opinion among the two schools should not tend to the exclusion of either." From that part of the resolution I must dissent. I think that pure homœopathy cannot be acquired where the two schools are mixed. If you select an allopathic professor as a teacher of the practice of medicine and our honored and distinguished friend, Dr. Hempel, as a teacher of materia medica, I cannot conceive how a man that goes there, open to receive homœopathic teachings, can graduate from that allopathic school with Hahnemann's pure ideas of homœopathy planted in his mind. If the Legislature of the State of Michigan has decided that the teaching of the university should be homœopathic, I cannot vote that the differences of opinion should not exclude either school. I indorse the remarks of the learned gentlemen who have previously spoken. If every member of this Institute would pledge himself to use his utmost endeavors to send every student from every part of this continent to that university, I would spend my last dollar to do the same. But that cannot be done. It is impossible as long as we differ among ourselves in the teachings of homœopathy; one school teaching one system, and another school a different system. I don't see how it can be accomplished at all, if there is —

At this point the previous question was called for, and, being ordered, further discussion was ruled out of order. The main question was put, and the resolutions were unanimously adopted.

HOMŒOPATHIC PHYSICIANS ON BOARDS OF HEALTH.

DR. J. C. MORGAN: I wish to offer the following resolutions:

Whereas In many communities the civil authorities have repeatedly shown a disposition friendly to the claims and rights of homœpathic physicians to seats on Boards of Health, and other branches of the public service, therefore

Resolved, That such action of public officers is observed with the highest interest and approval by the practitioners and friends of homœpathy, comprising a large body of the most respectable citizens of the United States.

Resolved, That the friends of homœopathy will sustain, in all proper ways, such officers as may take action in accordance with the just claims of our school.

In presenting these resolutions, I would say that, in Keokuk, Iowa, Dr. Seidlitz, who is now a candidate for admission to membership with us, has been contending for some time past with the Board of Health. He demanded, in the name of the friends of homœopathy, a position on that board, which consisted of three members. He has succeeded so well, that I may say that, out of those three antagonists, he has left two dead or wounded on this battle-field; that is to say, in order to keep him out, they reduced the Board of Health to one man, and he expects to kill him off in a few weeks. I think it is due to the public authorities of Keokuk, and all other places similarly disposed, to indorse any just action which they may take in favor of homœopathy. I hear that the same controversy has been in progress here in St. Louis; and that, but for fear of a conflict in time of sickness or pestilence, the Mayor would have appointed a homœopathic physician on the Board of Health. I think it would be a good plan to place on record these facts with reference to the action of local authorities of cities. For the purpose of

giving the necessary support to those officers, the national homœopathic body of this country ought to give their unqualified approval of such action.

The resolutions were unanimously adopted.

CASE OF BAILEY *vs.* NEILSON.

D. THAYER, M.D, of Boston: I regret very much that the duty devolves upon me of presenting the charges of Dr. J. B. Bailey against Dr. J. C. Neilson, both of Charlestown, Mass., with the accompanying documents. I move that they be referred to a committee of seven.

DR. MORGAN: Will the effect of that action be to require the taking of testimony before a committee who live in various parts of the country; or will it be expedient to appoint a subcommittee, to be aided by such members of the Institute in Boston or thereabouts as they shall think proper?

THE PRESIDENT: The chair is not advised as to the nature of the application.

DR. GREGG: I think it is a subject which does not belong to this Institute at all. I protest against such subjects being brought before the Institute. It is simply a local matter, and I move its indefinite postponement.

DR. MORGAN: I second the motion. This appears to be a matter for the Massachusetts Society to settle, instead of bringing it here.

DR. HEMPEL: Most of us are unacquainted with the nature of this difficulty. To vote understandingly, we ought to have a general idea of what it is; if it is possible for the gentleman to give us an idea of this difficulty in a few words, I think it is important that we should have it.

DR. THAYER: I offered these papers as they were sent to me by a gentleman who feels that the greatest injustice has been done to him. I proposed their reference to a committee who should investigate the matter. Why does a gentleman who

knows nothing about a matter second a motion for its indefinite postponement? I believe it was Lycurgus who once said that the best government is that in which a wrong done to one is a wrong done to all. I know there has been an outrage committed upon an individual here, which no man present would ever submit to, — never! If this matter rests here, I have done my duty. I have not the slightest interest in the case, but justice between man and man requires us to sustain the right; for justice is a gem, and fair play is a jewel.

DR. FRANKLIN: Really, I think this Institute has too much upon its hands to turn itself into a court of correction and reprimand. If we are to reprimand every little indiscretion, we will have our hands full, without any reference to the business of this Institute. Let personal affairs be settled where they originate. I trust that the good feeling and harmony now prevailing will not be disturbed, and that this matter will be withdrawn. Let no personalities or recriminations be permitted to enter the walls of this Institute.

DR. BEEBE: Can Dr. Thayer state to the Institute the substance of the charges brought? If there is anything in them affecting the professional character of one of our number, we ought to investigate them. If it is a personal matter, we have nothing to do with it; but, if it bears on the character of one of our members, we cannot, in justice to ourselves, let it alone.

DR. THAYER: It is a matter very gravely touching the character of an individual, and seriously affecting the condition of homœopathy in the neighborhood of Boston. If further remark is necessary I will go on, but I hope not. I wish that the charges may be referred to a committee. I am willing that the matter shall rest there, having discharged my duty.

H. B. CLARKE, M.D.: I learn that the question has been settled by the Boston Academy of Homœopathic Medicine. I do not know anything about the merits of the quarrel (for I believe it

amounts to about that), but I, for one, protest against its being lugged in here to occupy our time.

DR. THAYER: The gentleman calls it a quarrel, and says the matter has been settled by the Boston Academy of Homœopathic Medicine. I wish to say the question is very far from being settled by the Boston Academy.

J. P. DAKE, M.D.: We must take action here that comports with the character of this body. We have arraigned members of this Institute, tried them, and expelled them for unprofessional conduct. I should be sorry to see the day when we should refuse to examine charges against members which would render them unworthy to remain with us. Now, it seems to me, if there are charges to be preferred here against a member of this Institute, that it is proper that we should appoint a special committee to examine the case and report. Let us not take up two or three hours of our time in discussing it here. If the gentlemen will withdraw their motions, I will move the reference of the case to a special committee.

The question being upon indefinite postponement, further discussion was decided to be out of order.

The motion to postpone was lost.

DR. DAKE: I move that it be referred to a special committee of five. Seconded and carried.

The President appointed as the committee Drs. J. P. Dake, E. B. Thomas, L. M. Kenyon, C. J. Hempel and E. C. Franklin.

CLINICAL MEDICINE AND ZYMOSES.

The Bureau, through their chairman, H. D. Paine, M.D., presented a report, which was accepted and referred to the Committee on Publication. It consisted of the following articles:

Some Suggestions upon Hydrothorax; by S. M. Cate, M.D. (Section III., Art. 7).

The Epidemic of Yellow Fever at New Orleans in 1867; by Wm. H. Holcombe, M.D. (Section III., Art. 8).

Case of Obstruction of the Bowels; by Geo. E. Belcher, M.D. (Section III., Art. 9).

Tuberculosis with Sound Lungs; by David Cowley, M.D. (Section III., Art. 10).

Thermometrical Phenomena in Disease; by J. J. Mitchell, M.D., (Section III., Art. 11).

PATHOLOGICAL ANATOMY.

R. McMurray, M. D., offered the following resolutions:

Resolved, That it is the duty of homœopathic physicians to prosecute the study of pathological anatomy in its fullest extent, as a means of perfecting their knowledge of the nature of disease through its effects.

Resolved, That the knowledge derived from the revelations of pathological anatomy is, and ever must be, an indispensable assistance in the task of selecting the proper remedies in the treatment of diseases.

Dr. McMurray: Mr. President, it is the duty of the physician to know everything that can be learned with regard to the human system, in health and in disease. It is true that the revelations of pathological anatomy — the results of the dissection of the cadaver — give no knowledge of the disease *per se*, in its true nature; that is intangible. But the same thing can be said of electricity, and many other intangibles which are known only by their effects. But by these it is supposed that we have a very fair knowledge of their nature and character.

Again, it is said that we have never been able to find out certain effects and causes, — the causes of, or effects from, some peculiar nervous affections, for instance. This is also true; but does this prove that there are no such causes or effects? To deny their existence because we have not seen them, is simply begging the question. Pathological anatomy is of importance for the light which it casts upon the value of symptoms. We depend very much upon the totality of the symptoms, as giving the character of the disease, and as a basis of prescription. Now, I contend

that symptoms are simply the language that is addressed to us. It holds precisely the same position and relation to internal changes that language does to action of the mind; and it becomes our duty to learn the meaning of every symptom, as a child learns the meaning of every word. Through this medium we derive our information. How else was ever discovered that peculiar and fatal disease called Bright's disease of the kidneys? How did Lytle ever frame his magnificent system of pathology if not simply by the revelations of dissection, — by comparing one case with another, one set of symptoms with another, and all with the result of necropsy?

And now as to the influence of pathological knowledge upon the selection of remedies. It is a fundamental principle in our school, I believe, that the effects of all medical substances are more or less confined to certain organs or tissues. Well, if we confess ourselves ignorant of what symptoms mean,— of what is going on inside, — we are just so far from knowing precisely the tissues affected. Again, we know the increased susceptibility of a diseased tissue or organ to the effect of drugs. This consideration gives its force to the demand for pathological investigation. Next we notice an objection to this study which is urged with considerable force; and this is, the generalization which it favors: the information thus derived simply gives classes of symptoms. But, from the peculiarity of the structure of a diseased organ, the elective character of medicines will suggest a class of drugs in which you will probably find the proper remedy. No individualization is necessary. The class from which to select the remedy will depend upon the character of the organ affected. Lastly, it is urged that our school disowns this source of information. I deny that of our school as a whole, but admit its truth as to the teachings of some of our best physicians and some of our authors.

Dr. C. J. Hempel: I move a simple amendment to the phraseology,— that in one of these resolutions, where the word "*effects*"

comes in, there be substituted the following words: "*the changes it produces in the tissues.*"

DR. MCMURRAY: I accept the amendment.

DR. N. F. COOKE: I would like to have the word "*homœopathic*" stricken out from the resolution, and let it stand "*physician.*"

DR. MCMURRAY: I do not propose to speak for the allopathic profession, Mr. President. I am not a member of it.

DR. COOKE: The point is, whether that word does by implication admit the ridiculous assertion that we have ignored, or ever can ignore, pathology.

DR. MCMURRAY: I only wish to say that the remark of Dr. Cooke is just as much a truism as my resolution: consequently I do not think there is any need of his amendment being accepted.

DR. P. P. WELLS: Whatever were the grounds of the assertion that Hahnemann and his early followers were ignorant of pathological anatomy, we are to-day bound to be able to say that no such charge shall be brought against us. As a mere branch of knowledge, we must master it. But there is great danger of our misusing that knowledge to our own peril, and perhaps to that of our patients. The results of necropsy must never control our prescribing.

DR. MCMURRAY (interrupting): I think it was assistance, not control, of which I spoke.

DR. WELLS: I accept the change. Pathological anatomy cannot aid us in prescribing. Our law requires a comparison,—between what? Between the phenomena of disease and the effects of the remedy, but not between the lesions which disease makes and any agency that would produce similar ones; for we are to prescribe before the disease shall have wrought any change that anatomy could find. But, if otherwise, as certainty is our duty, the prover must carry the use of the drug to the extent of organic lesion, and then submit himself to dissection; and one immolation for each drug would not be enough. And then, for comparison, the prescriber must dissect his patients; and one

victim for each general form of disease would be too few. So our comparison cannot be between drugs and organic lesions. But, if the Institute desire, I would prefer to write out my argument more fully for the Transactions.

The Institute requested Dr. Wells to prepare the paper, and transmit it to the Committee on Publication. (Section III., Art. 6.)

DR. THAYER: I wish to ask whether or not Prof. Wells would abolish from our colleges the professorship of pathological anatomy?

DR. WELLS: Most assuredly, if that professorship is to impose a falsity upon the mind of the student; — if its teaching is to be made the basis of his prescriptions.

DR. THAYER: One question more. Would he also abolish with it, under similar circumstances, the professorship of anatomy?

DR. WELLS: No, certainly not.

DR. PHELAN moved to strike out the word "indispensable." Pathology is necessary to the physician, and aids him in combating the allopath. Pathology is abnormal physiology, and physiology was in a crude state till the symptomatology of Hahnemann threw light upon it.

DR. VERDI: I propose that we do away with physiology, pathology, and therapeutics, and that the practice of medicine hereafter consist in the Repertory and in the Symptomatology.

DR. MCMURRAY: The resolutions having served their full purpose, — that of eliciting discussion upon the important subject of pathology, — I will now withdraw them.

BUREAU OF SURGERY.

WILLIAM T. HELMUTH, M.D., Chairman of the Bureau, reported as follows:

Gentlemen of the Institute, —

It gives me great pleasure to announce to you to-day a full

report of the Bureau of Surgery. When we look back over the past few years, and examine the transactions of the different homœopathic societies of the United States, we find that surgery has made as great strides as any one of the collateral branches of homœopathic medicine. It gratifies me to present to you cases and reports from all sections of this country, — articles which, I certainly know, would do credit to any society in any country.

Before, however, proceeding to the report, I would like to make a few explanatory remarks with reference to the report made by myself at New York last year. I then reported a case of traumatic stricture of the urethra; and, in conversing with my friend, Dr. Beebe, upon the report, in which I had mentioned his name, he supposed (and when I look at it myself, I think so too) that it read as if the case came directly from Dr. Beebe to me, and that, perhaps, I had accomplished what Dr. Beebe had not; which I certainly did, — for the patient lived under his care two years, and under mine twelve days.

The following papers were then presented:

Strangulated Hernia; by J. Beakley, M.D. (Section V., Art. 9.)

Ligature of the External Iliac Artery; by J. Beakley, M.D. (Section V., Art. 10.)

Acupressure and other Cases; by G. D. Beebe, M.D. (Section V., Art. 11)

Imperforate Anus; by E. C. Franklin, M.D. (Section V., Art. 12.)

Cases from Practice; by J. C. Morgan, M.D. (Section V., Art. 13.)

Pittsburg Hospital Cases; by L. H. Willard, M.D. (Section V., Art. 14.)

Surgical Experiences; by T. G. Comstock, M.D. (Section V., Art. 15.)

Caries of the Ankle-joint; by J. H. McClelland, M.D. (Section V., Art. 16.)

Rupture of the Thoracic Artery in a New-born Infant; by H. H. Hofmann, M.D. (Section IV., Art. 7.)

Dr. Franklin exhibited a patient from whom a large portion of the lower jaw had been successfully removed for osteosarcoma. The disease, which was extensively developed, had not returned since the operation.

Dr. Helmuth presented a photograph, and narrated the treatment of a boy who had his foot dislocated, and had been treated six months by allopathic physicians for caries of the bones of the foot. He reduced the dislocation, and sent him home well.

The report of the Bureau was accepted, and referred to the Committee on Publication.

IMPORTANT SURGICAL OPERATION.

Dr. Helmuth exhibited a case of aneurism of the carotid artery, with venous anastomosis. He proposed to treat it by acupressure, or passing a needle behind the vessel. He said, if this should be successful, and if the circulation through the carotid can be arrested without any incision, it would certainly be one of the greatest advantages which would be derived from the introduction of acupressure, which was considered only as a means of arresting surgical hemorrhage. The patient was then put in position, and an acupressure needle was passed behind the vessel. This was the first operation of the kind which he had performed, and he hoped it would be successful.

The Institute then took a recess of fifteen minutes.

Afternoon Session.

The Institute reassembled at quarter before 2, P.M.

BUREAU OF OBSTETRICS.

R. Ludlam, M.D., of Chicago, presented a report, on Spasm

and Rigidity of the Os Uteri. which was referred to the Publication Committee. (Section IV., Art. 6.)

BUREAU OF ANATOMY.

T. F. ALLEN, M.D., of New York, Chairman of the Bureau, presented a report, which was received and referred. (Sect. VII., Art. 1.)

BUREAU OF PHYSIOLOGY.

A report on the general subject of Physiology, by J. H. P. FROST, M. D., of Philadelphia, was received and referred to the Publication Committee. (Sect. VII, Art. 2.)

CASE OF DISCOLORATION BY NITRATE OF SILVER.

DR. H. S. CHASE, of St. Louis, exhibited to the Institute a person residing in St. Louis, whose color had been entirely changed by the use of nitrate of silver, administered in the treatment of epilepsy. After the patient had taken a grain and a half, three times a day for three months, the change in color commenced, and continued until the whole skin became of a deep-blue or leaden color.

THE INTERNATIONAL CONVENTION.

The Secretary read the report of B. W. James, M.D., Delegate to the International Convention, held at Paris, Aug. 9, 1867. It was referred to the Publication Committee. (Section VI., Art. 7.)

CODE OF MEDICAL ETHICS.

The report of the Committee, as printed in the Transactions of 1867, Section I., Art. 3, was, on motion of Dr. H. B.

Clarke, unanimously adopted as the Code of Ethics of the American Institute of Homœopathy.

J. J. YOULIN, M.D., of Jersey City, offered the following resolution, which was unanimously adopted:

Resolved, That the hearty thanks of the Institute are due, and are hereby extended, to Carroll Dunham, M.D., with his associates on the committee, for the able and acceptable manner in which they have performed their duty in preparing a national code of ethics.

DR. KELLOGG: I arise to ask whether this report will now be published in full in the forthcoming Proceedings. It seems advisable in order that new members may have it.

DR. TALBOT: This code of ethics might be reprinted in pamphlet form, together with the constitution, by-laws, and list of members, at very little expense, instead of inserting it a second time in the annual proceedings. It would make a cheap and convenient pamphlet for general circulation throughout the country.

DR. CLARKE: I move that the Secretary be instructed to have published the Constitution, By-Laws, and Code of Medical Ethics, and names of the members, as proposed.

Motion carried.

ANNUAL ADDRESSES.

DR. LUDLAM, of Chicago, offered the following:

Whereas, in the opinion of this Institute, the necessity for public addresses in favor of homœopathy in our large cities and communities has passed away, —

Resolved, That in future the annual addresses to this body shall be upon some scientific or professional subject, and not upon popular medicine.

He added: I have no reflections upon my friend Clarke, who delivered so excellent an address last evening, but I think we have outgrown, in these large communities, any necessity for popular addresses upon medicine. We would all of us, I think, prefer one of a scientific nature.

DR. CLARKE: I hope the Institute will not pass the resolution, although I agree entirely with the explanation made. We may arrive at the same result by allowing the matter to take care of itself. There may be times and places where a popular address may be a very efficient and useful thing. I know that in Pittsburg, two years ago, an address given there by Dr. Helmuth was the means of forwarding the homœopathic practice in that town to a very considerable degree, and of elevating its character. I hope that this will be left to the discretion of the speaker and the Committee of Arangements from year to year. When I was invited to speak here, I was told that there would be a public meeting, and I prepared my address solely for a meeting of laymen; and, of course, I was a little embarrassed last night to find I had an audience of doctors and their families. I hope this resolution will not become the formal action of this body, because I think it is too grave a treatment of a matter of such little importance, and I think there will sometimes be a real benefit derived from the speaker giving a public address; and, when it is deemed expedient, we can easily have a professional address.

DR. MORGAN: I really do think homœopathy cannot be too much advertised through the medium of the Institute. Were we to withdraw ourselves entirely from the public, they would lose the lecture, and we should lose just what we gained in Pittsburg on the occasion of Dr. Helmuth's oration.

DR. WELLS: Homœopathy has outgrown the need of any such sort of advertising, in my judgment. If you wish to advertise the system in a community, there is but one way left for you and me and all this body; and that is by increasing our practice, and by the certainty and speed of our cures. The time has gone by for standing up before public bodies, and. telling them we think this and that. It is likely to have no effect in adding to our dignity and influence in the community. The time given to this question of public advertising can be

much more usefully employed in the discussion of some science which belongs properly to the profession.

DR. KELLOGG: It does seem to me somewhat beneath the dignity of this association to take this method of what they please to term *advertising*. Here we have a central organization embracing the whole country; many of us come from distant parts of the country and listen to an address, not intended for us, but for the inhabitants of that particular city in which we happen to meet. We do not come here for that purpose. We come here for our own individual good; and I, for one, am in favor of elevating these addresses into something which we physicians can listen to with pleasure and profit. I hope the resolution will be adopted.

DR. MORGAN: I do not mean to use the word "advertisement" in any sense that will derogate from the dignity of the Institute, or of any member of it. There is nothing more pleasing to me than to see the spirit of independence among our menbers. Homœopathy stands forth conscious of strength. Dr. Clarke has very properly called attention to the Pittsburg address, productive of so much good. The whole world is not in the happy condition of New York, or even of Chicago; and we may be called to meet in cities in which such defence of homœopathy would be of great value to our cause; and certain localities, are selected for meetings of the Institute for the very purpose, more than any other, of making the people better acquainted with homœopathy.

DR. CLARKE: I would not speak against the spirit which moved this resolution. Our larger places have outgrown the necessity of these popular addresses. Yet in many smaller places, — my own, for example, — where attention has not been much called to homœopathy, such an address would be received with great interest, and would have a good effect. I should, of course, repudiate the idea of advertising; but there are communities which hardly know the meaning of the word "homœo-

pathy." If we go into such a place, we may benefit that community by an exposition of it.

DR. MORGAN (interrupting): That is advertising.

DR. CLARKE: Not in the sense of a business proceeding. Informing a person of something of benefit to him is quite another thing. I think myself that a popular address—my own particularly — ought not to be published in the Transactions of a scientific association. If it be worth publishing for circulation for the purpose of informing the people, I would prefer to see it published separately.

DR. TALBOT: I, for one, can testify to the modesty of Dr. Clarke. At the meeting of the Massachusetts Society, he gave one of the best scientific addresses ever delivered before that body. And I, as Secretary, had to labor very earnestly with him to get that address for publication. The remark he has just made arouses my fears in regard to the excellent address to which we listened last evening, and which, however much I might be opposed to making the annual address a popular affair, I should certainly wish to see published in the Transactions. I accede entirely to the spirit of this resolution that the time has gone by when we need to repeat the history of homœopathy. In these addresses, I think we need something to benefit the members, rather than to educate the people. And just as homœopathy is improved, just as this American Institute is elevated and its members educated, just in that proportion will homœopathy stand higher with the public.

I think that what this resolution designed to accomplish has already been gained. As there is nothing in the by-laws in relation to it, the Committee of Arrangements may regard the ideas here thrown out as an expression of the opinion of the Institute that it has attained to that weight of scientific character which will exempt it from resorting, as a general thing, to popular addresses as an expedient to make itself known.

Dr. LUDLAM: My chief object in offering it has been accomplished. I therefore withdraw the resolution.

On motion, the Institute adjourned to Friday, at nine, A.M.

EXCURSION FESTIVAL.

At four o'clock, P.M., the delegates, with ladies and invited guests, went on board the steamer Belle of Alton, for a trip up the river. About three hundred persons were in the company, and the Committee of Arrangements spared neither pains nor expense for the gratification of their guests, and were entirely successful. The trip extended to Alton, and the most cordial sociability was indulged during the entire excursion. Soon after leaving Alton to return, a banquet was spread in the saloon, at which his Honor Mayor Thomas presided. Speeches and music enlivened the occasion; and the excursion, as well as the sojourn in St. Louis, will long be remembered with pleasure by the members of the Institute.

THIRD DAY.

MORNING SESSION.

The Institute met on Friday, June 5, at nine o'clock, A.M., the President in the chair.

BUREAU OF HYGIENE.

The following papers were presented, and referred to the Publication Committee:

The Province and Medical Application of Hygiene; by Carroll Dunham, M.D. (Section VII. Art. 3).

Atmosphere and Water; by N. D. Tirrell, M.D. (Section VII., Art. 4).

Alcohol as a Hygienic Agent; by C. W. Boyce, M.D. (Section VII., Art. 5).

Formation of Sound Teeth, and the Shedding of Deciduous Teeth; by Henry S. Chase, M.D. (Section VII., Arts. 6 and 7).

BUREAU OF OBSTETRICS.

Further reports of the Bureau were received and referred, as follows:

Report by the Chairman, H. N. Guernsey, M.D. (Section IV., Art. 4).

Obstetric Notes; by J. H. Woodbury, M.D. (Section IV., Art. 5).

Dr. T. S. Verdi said that he desired to have his name removed from the report of the Chairman, as there were some statements in the report which he could not fully indorse.

The President: It will be competent for the gentleman to withdraw his name from the report.

BUREAU OF ORGANIZATION, REGISTRATION AND STATISTICS.

The report was taken from the table.

Dr. Beebe moved to indefinitely postpone that portion recommending "that the officers of the Institute constitute an Executive Committee, which shall arrange the business of the meetings of the Institute," etc.

Henry M. Smith, M.D, of New York: I think, sir, that this section is one of great importance. We have now no one to look after the affairs of the Institute *ad interim*, — no one authorized to arrange the business meetings. Last year, without consultation with the President and Secretary, this duty was assumed by the Committee of Arrangements, who considered it necessary for the purpose of expediting the business of the meeting. This year we came together with no order of arrangement; no one knew what we were to do, or what was to be the course of business. If the Executive Committee should arrange and systematize this, it would save our time considerably. Members

who could only attend one day, or part of the session, could manage to be present when matters in which they were interested would be before the Institute.

Dr. Beebe: I like order and system as well as any member of the Institute, but I am opposed to centralizing the power in the hands of any one man; and, in my estimation, this recommendation would amount to this. We have too much of that already; and it has been my purpose, at some time during the session, to give expression to some sentiments that I have entertained, and, in view of the past, cannot help entertaining. It has been the choice of the Secretary to expunge from the Proceedings all matters that do not suit his particular views. If a member rises in debate, and the Secretary chooses to expunge his name and remarks from the printed Proceedings, it has been done. It was done at the Pittsburg meeting. The Proceedings of that meeting omitted all mention of the names and remarks of some of the members, toward whom the Secretary seemed to have some ill-feeling. Again, last year, the Chicago Medical College, the Illinois State Society, and the Cook County Medical Society, appointed their delegates, furnished them with credentials, and sent them to New York to attend the meeting of the Institute, and represent those institutions there. Each delegate presented his credentials and made his report there, and yet the the whole of this was expurgated from the Proceedings, and not one word appeared in relation to the Chicago institutions. If it is deemed best to have a committee who shall arrange and order the course of business of the session, I should not object: but I think that this Institute is competent to adopt a regular order of business, and to proceed according to that order; and to say that any one man shall arrange as to who shall present papers, and who shall not, is centralizing altogether too much power in a single man. I have noticed, since I have been here in this session, there seems to be the same feeling creeping into the reports in the papers, and that the remarks of certain

members are suppressed. Now, I do not like to see this spirit shown. I do not like this invidious distinction against individuals. If a man has a personal feeling against any individual, let that personal feeling be kept out of our meetings and kept out of official conduct.

DR. TALBOT: I am very glad to hear the remarks of Dr. Beebe, if he has any such feelings. At the meeting at Pittsburg, no reporter was provided. I had two assistants to take down remarks. The reports, as taken down by these two men, were as carefully and fully given as they could be. Nothing was expunged that was then noted down. I have endeavored always, on every occasion, to give the remarks of those who might seem in any way to be opposed to me more fairly than any I myself made.

Last year a short-hand reporter was employed, and the discussions were given in full, — too much so, I have been told. In regard to the Illinois institutions, there seems to be a little difference of opinion. I certainly had every wish to have that State represented, and for my part I made every effort to that end. I sent circulars and letters to the various institutions in Illinois, but without receiving any reply. The report of the State society, *which was inserted*, I was obliged to make up from such journals or papers as I chanced to have, or could obtain. I had no motive — nor could I have had any — in suppressing anything connected with the State of Illinois. I have endeavored, in every way, to be just to the Institute itself, and to every member or set of members connected with it.

One word more. I have opposed, as far as possible, the centralization of power, and endeavored to prevent any one man from exercising undue influence or control. It was for this very purpose that, at the commencement of this meeting, I wished to have a committee appointed to take from the Secretary the arduous duty, labor, and responsibility of arranging all the business. And, Mr. President and gentlemen, the object of this

recommendation is to relieve the Secretary from any suspicion, and at the same time give the sessions of the Institute the benefit of method, so that the time can be most profitably occupied.

DR. FRANKLIN: I am very glad, sir, to see this thing come up. Our Proceedings, to a certain extent, absolutely stultify us in the minds of men who are posted in the profession as homœopathic physicians and surgeons. Articles should be published by departments, and suitable persons should preside over those departments, and superintend the publishing. For instance, Dr. Helmuth reported his case of removal of the lower jaw, while at Indianapolis; but when I read, "This difficult operation had been performed but three or four times in the United States," it brings upon my cheek a blush of shame that such a thing should appear in the Transactions. The merest tyro in the profession must feel stultified when this is presented to him by a brother practitioner, as it was to me, and laughed at and commented upon as a most extraordinary and exceedingly ridiculous and foolish statement.

It is to keep out these erroneous matters that I speak; and I trust that some arrangement will be made, by means of which parties representing these various bureaus may be permitted to examine the papers before they are placed upon record. Now, certainly, if Dr. Helmuth stated that fact, he must be made responsible for it, and it must fall upon him only; but if the Secretary stated it, it is erroneous, and had no right to be there. I would like to see some plan adopted by which the papers may belong to the different departments, which shall superintend the printing of them.

DR. H. M. SMITH: Allow me to state again that, instead of giving the power to one man, the measure proposed is democratic, and aims to divide the power among a number. Further along it authorizes the appointment of these Bureaus by the President, with the advice of the other members of the Executive Committee. Remember, gentlemen, that the members of the Executive Com-

mittee are officers in whom you have had sufficient confidence to lead you to elect them. It is proposed that the President shall appoint all your Committees, — the Vice-President having equal power during his absence, — the General Secretary to record these proceedings; and these, with the Provisional Secretary and the Treasurer, shall form an Executive Committee of five who shall conduct the business of the Institute when it is not in session.

It is to these only that you are delegating this power, if such it be. It is merely appointing these gentlemen as a Standing Committee to attend to matters quite different from those intrusted to the Committee of Arrangements, who attend to the engaging of rooms, and things of that kind. In regard to the Publishing Committee, of which Dr. Franklin speaks, it has been a general custom at the close of the session for some one to move that the Officers of the Institute be appointed a Publishing Committee.

Dr. Beebe's motion to indefinitely postpone was carried.

Dr. D. S. Smith, of Chicago: I now move that the further consideration of the whole report be indefinitely postponed.

The motion was lost.

The article raising the annual dues to five dollars was taken up.

Dr. Franklin: I think we ought to understand how many delinquents there are before we double the tax upon those who do pay. If members belong to this Institute and do not pay their arrears, something should be done with them, and not double the tax upon those who are here. I would like to know something in regard to the necessity of this increase.

Dr. D. S. Smith: I have had a little experience as Treasurer of the Institute. In 1865, with the annual dues at one dollar, I collected about $330. I sent a dunning letter to every one in arrears whose name was on the books. Some of them wrote letters of explanation; some said they would pay on receipt of

the Transactions; some complained of one thing, and some of another; but a great many complained without reason, and simply did not want to pay. As the dues are at present, we are raising some $1,500 or $1,600. This year we are in debt $500. I do not mention this in view of censuring anybody. Far from it. The printing of the Transactions has been a very expensive affair.

I think we are expending too much upon printed matter,—which is our chief expense,—and I think it quite proper that there should be retrenchment; and with a reasonable retrenchment the present rate of assessment would, in my opinion, pay all the necessary expenses and leave a surplus in the treasury. The Secretary should exercise some discretion in pruning down the reports. Dr. Beebe did so, and I did so when I was Secretary. I was told that others did the same thing, and I never heard any complaint. Now, I think that the present dues are quite enough; and I believe the Institute will receive more from the present assessment than by an increase to five dollars.

Dr. Talbot: I would inquire if the complaint was not brought against the Secretary this morning "that he exceeded his discretion in omitting certain parts from the Transactions"?

Dr. Beebe: Let me make a correction just here. The complaint this morning was not that the reports in the papers were pruned. There was a suspicion that, when individuals or organizations were invidious to the Secretary, the printed Proceedings passed them by in silence. My object in speaking of it was to call out the explanation which the Secretary has made. But, sir, in reference to this matter of increasing the dues, the Treasurer has reported that there are five hundred and forty-three names retained on the list of paying members. To this number we have added at this session enough to make about six hundred paying members. Now, a tax on these men of three dollars will yield $1,800 of revenue, independent of the initiation fees of the new members, which will carry the amount to

$1,900 for the next year. If we raise this tax to five dollars, a great many who now pay their dues will probably refuse to pay; and so a small number will have to asume the whole burden. I do not see the wisdom of this movement. I think it would be vastly better — if $1,800 or $1,900 is not enough to run this Institution — that we practise a little more economy. It has been the habit of Secretaries heretofore to read and correct their own proof as the proceedings are going through the press; but here is a bill brought in of ninety odd dollars for the service of a man to read proof, and do the same work that the Secretaries have done before. I have no complaint to make against legitimate expenses attending the Secretary's office; but a little economy had better be practised, rather than pile on these dues and force out of our organization men of talent whose membership is perhaps desirable. And, for my part, I am ready to make voluntary subscription to cover any deficiencies now or hereafter; but I know there are members who do not feel able to do this. If it were necessary to subscribe ten or twenty-five dollars to make up the deficiency, I would do it; but I have friends who could not, and yet desire to be members of this Institute.

Dr. Talbot: I wish to say a word concerning the publications of the Institute. A volume, as you have seen, of some six hundred pages, has been published during the past year. The American Medical Association, a society of fewer members, yearly expends in its publications between four and five thousand dollars. It is true that we, a larger association, have, some years, confined our publications to a few dozen pages, but is it desirable for us to do so? There have been presented at this session more valuable papers than ever before. If these are to be published, it will make a larger volume, and necessarily more expensive. Now as to the amount of the annual assessment. Is five dollars a large sum to pay to the American Institute of Homœopathy? Many of our State societies have fixed the

dues at five dollars, and some of the smaller societies the same. Each member who attends our meetings does it at an expense of from fifty to five hundred dollars. If we, who are fortunately able to leave our homes, cheerfully incur this expense, and bring with us our choicest studies and experiences of the year, what is the insignificant sum of five dollars, required to complete the work of the meeting, — to extend this information through the whole profession, and reflect credit upon our school and this Institute?

A word in regard to the sum of ninety-five dollars which I expended. It was proposed at the last meeting that the Secretary should have at his disposal *two hundred dollars* for clerkship and other purposes. I employed a man of excellent attainments, one most competent to assist me in the general work of revising the articles for the press. Aside from the other labor which, as Secretary, has devolved on me, I have myself gone through with these Transactions five different times before sending to press and in proof; and this work, I think, has been more than four times that paid for. On presenting that bill to the Committee on Finance, I offered to pay it myself, if desired, but this was unanimously refused. And yet I shall be happy to present that amount to the Institute, if any member here objects to its being paid.

Dr. Franklin: It is not, sir, so far as I am concerned, that any objection is made to the publication of the Transactions, or of any matter connected with it. It is a purely pecuniary consideration, and, I think, can be ascertained mathematically —

Dr. Talbot: I would beg to correct the gentleman. It has been suggested that we should practise economy, and that the Secretary has paid an unnecessary bill of ninety-five dollars.

Dr. Franklin: I think myself that economy is wealth, to institutions as well as to private individuals, but let us look at another point. It seems to me that this Institute presents an imposing array of members belonging to it, — one thousand

in number; but there is a large proportion of them in arrears, the annual dues being three dollars. Now, if two hundred are in arrears at three dollars per year, how many will be in arrears when you make that sum five dollars? I do not think that you are going to raise any more money by the change. I am willing, as Dr. Beebe says, to resort to voluntary contributions; but, if we cannot compel persons to pay three dollars, and they withdraw from the Institute, in consequence — it may be — of their pecuniary inability, how many more will withdraw when the demand is larger? I think, if we go on in this way, the probability is that we shall have about two hundred members paying — at the rate now proposed — $1,000, instead of the $1,900 that we can raise, as demonstrated by Dr. Beebe, at the lower rate. It seems to me a plain matter of demonstration.

Dr. Verdi: I think that in an institution of this kind, containing so many members, there are always a number who are perfectly indifferent as to whether the society lives or dies. They like to see their names in print. It looks very well to them, but they would not only be unwilling to pay five dollars, but they are unwilling to pay two dollars, or even one. I do not think the condition of our finances would be injured by raising the fee to five dollars, or that it would be made any better by reducing it to two dollars; and, even if we reduce it to one dollar, I do not believe that these gentlemen would care to pay even that. I shall certainly vote for the five dollars.

Dr. Hempel: Some of those gentlemen who have advocated an increase in our yearly dues are not aware, I am perfectly satisfied, of the great difficulties with which the hundreds, and perhaps thousands, of our country practitioners have to contend. I know very well that five dollars is a small amount to many. I should be perfectly willing to pay ten dollars, — not that I am a rich man, but I can afford it, and it would not hurt me; and I know there are hundreds of others that could do the same. But where there is one such there are ten who cannot afford to

pay even two dollars. I know this from personal observation. You will find a great many who would like to become members of this Institute, — young men in the profession, just starting out, but who are obliged to purchase instruments, books, and medicines in order to practise and earn money enough to support their small families. I move, therefore, that three dollars be continued as the regular dues for members.

Dr. Hempel's motion was carried.

THE PRESIDENT: The question is now upon the adoption of the section as amended.

DR. HEMPEL: Before this question is decided, I will state an objection to one point. As I understand it, the delegates are required to pay the annual dues the same as regular members. I think it would not be a fair thing that we should receive delegates on a basis of hospitality, and then require them to pay for the use of their chairs, and the privilege of taking part in a discussion.

DR. H. M. SMITH: Delegates come here to represent societies, and have the same privileges as the regular members; and, if they receive a copy of the Transactions, they should bear a part of the expense; otherwise it would be unjust to the members. The Institute should encourage every member of the profession to join and help support it.

DR. VERDI: I do not see that a delegate has the power to vote. A gentleman may be sent to present a paper to the Secretary. I do not see how we could tax him for merely being sent here. It would be very ridiculous for us to say a man cannot get out of the room without paying his fee. Therefore I move that the question of fees of delegates be stricken out of that amendment. Seconded.

DR. D. S. SMITH: A delegate ought to pay, as Dr. H. M. Smith has already stated, because he enjoys the privileges of a member, besides receiving the Transactions: it is worth paying for.

DR. HEMPEL: In the course of our discussion I have changed

my mind in regard to the subject. I think a delegate might be requested to pay and settle his accounts with the society of which he is a delegate.

DR. VERDI: If a man is not a physician, but is authorized to present papers as a delegate, is he to be received as a delegate, or not? I was one of the committee on the reception of delegates. Objections were made to receiving one who was not a member of the Institute. I thought he should be received, not only if not a member, but even if he were no physician. I do not know whether I am right or not.

THE PRESIDENT: There is no provision in the By-laws on this subject.

DR. SWAZEY: I approve of the feelings expressed by Dr. Hempel. Delegates should not be taxed. It is merely carrying out the idea of courtesy to such persons, as, for instance, the gentleman from Liverpool (Dr. Moore), who honors us with his presence. I think it ill becomes the Institute to be running a sharp account with everybody who comes in here.

DR. H. M. SMITH, of New York: It has been a custom of the Institute, — and, in the absence of all specific rules, custom takes precedence—to receive as delegate only duly qualified physicians. Now this amendment reads "properly accredited delegates." We cannot say this of delegates who do not belong to the profession.

DR. GREGG: I would inquire if these delegates may vote?

DR. SWAZEY: Yes, sir. They have always voted.

DR. GREGG: I think, Mr. President, that they should not be allowed to vote. If societies cannot send members of this Institute as delegates, they should ask their delegates to become members.

DR. BEEBE: There is a gentleman sitting near me who is a delegate from five Institutions. I suppose, then, that this delegate has five votes; and, at three dollars annual dues, I suppose he should pay fifteen dollars.

DR. TALBOT: I would offer, as a substitute for Dr. Verdi's motion, the following; that the first part of Section 2, Article IX., be amended to read as follows:

"Section 2. Properly accredited delegates, being physicians, shall be admitted during the session of the Institute to all the privileges of members, except voting and elegibility to office, on the following basis:"

Also that the words "and delegates" be stricken out from Section 5, Article IX., so that it will read as follows:

"Members shall be required to pay annually the sum of three dollars towards defraying the expenses of the Institute."

Dr. Talbot's motion was carried.

DR. HEMPEL: Are the amendments adopted a part of the report?

THE PRESIDENT: The chair so understands it.

DR. TALBOT moved the adoption of Article IX. as amended. Carried.

The Institute then took up the proposed amendments of Article X.

DR. BAER: I move that there be a Bureau of Microscopy. There has been a vast advance in this branch of science, and none can have more interest in this study than homœopathic physicians.

DR. TALBOT: I am very well convinced, from my experience in the Institute, that it is not desirable to greatly increase the number of bureaus, nor yet to add very much to their present size. Each of these bureaus has a separate section of the Transactions devoted to it; and it is important that these divisions should not be too minute. These bureaus should collect and annually present the labors of the whole profession in their department. This is no light task; and, as small committees are proverbially more efficient than large ones, the bureaus should not be too large. For the present year, I would move that the Bureau of the Materia Medica shall con-

sist of nine; Clinical Medicine, nine; Obstetrics, seven; Surgery nine; Organization, five; and, in accordance with the wish of the chairmen of the different Bureaus of Anatomy, Physiology, and Hygiene, that these bureaus be consolidated into one, composed of seven members, and that the other bureaus proposed in the report be omitted.

DR. BAER withdrew his motion.

DR. DUNCAN: We have heard the opinion of the Secretary that we may grow too fast. I think we cannot. These six hundred and fifty members (seven hundred now, as I understand) have only ground enough laid out for a small county society. It does not come up to the present requirements of homœopathy. We need much more ground than we have now, so that we can work; and, instead of cutting down the number in the Bureau of Materia Medica, I propose that in the Bureau of Clinical Medicine also, one gentleman from each State should be appointed. As we grow in numbers, these committees will increase, and we will have reports that will be an honor to us; and the Transactions, instead of being, as at the present, merely a book of reference and of small value, will be worth ten dollars, and will be gladly purchased at that price.

DR. BEEBE: We have here recommended a Bureau on Psychology. Now I suggest, Mr. Chairman, that we ought to have one on spiritualism, and one or two on the analyzation of urine, and a hundred other subjects equally irrelevant to the business of this Institute. We have some men, I am sorry to say,—and they are to be found on this Bureau of Organization,—that seem to have change on the brain. They never can come into a meeting without proposing forty or fifty changes. Everything must be changed every year. Now, sir, I am decidedly opposed to this mania for change. When we have an organization that is working well, let us hold to it and work. This Bureau of Organization has caused more discussion in the last

three or four years than all the scientific subjects that have been brought before our Institute. I would remind members that there is a Western Institute; and, if we are to be subjected to these annoyances so constantly, some of the working material will, I fear, be lost to the American Institute.

DR. LUDLAM: It seems to me that a house furnished wholly with bureaus would look very odd. In the bureaus of the Institute we have more drawers than we can well use. It seems to me that, if some of these bureaus were united, we should have more work done. It is very natural, however, that from talking on finances we should come to talk of *change*. I hope we will get through the matter as soon as possible.

DR. TALBOT'S amendment was adopted.

DR. TALBOT: In order that the Secretary may be relieved from some portion of responsibility, care, and labor, and in order that he may have the aid of the other officers of the Institute, I move the reconsideration of the vote by which the proposition, that the officers of the Institute shall become an Executive Committee, was indefinitely postponed.

DR. BEEBE: I move as a substitute that the officers of the Institute be considered a Publishing Committee.

The motion was lost, ayes 9, nays 11.

The vote was then taken on Dr. Talbot's motion to reconsider, which was carried.

DR. H. M. SMITH: I move the adoption of the amendment.

Carried.

The whole report of the Committee on Organization, with the amendments, was then adopted.

DR. D. S. SMITH: It seems to me, in common with many other members, that too much time is annually consumed in matters of petty legislation. I sympathize heartily with my friend, Dr. Beebe, in his opposition to this "change on the brain."

DR. MORGAN: It has been remarked by many that petty legislation crowds out scientific business. I presume this resolution, however, will not elicit debate:

Resolved, That, in the meetings of the Institute, the first business in order, after completion of the annual organization, shall be the presentation of reports of bureaus and of all other scientific papers; and that the miscellaneous business shall follow the same.

Adopted.

DR. VERDI: I would like to offer a resolution which I would wish referred to a special committee. It is a subject of great importance; and I would like that this special committee should have a whole year to consider it:

Whereas The object of the American Institute of Homœopathy is to increase professional and social intercourse among all the homœopathic physicians of this and other countries; to impart mutually the medical experience and knowledge of each for the benefit of all; to infuse cordial and fraternal feeling among them; and,

Whereas, One annual meeting at different places, which, in this vast country, must necessarily be so remote from others as to prevent the meeting of many who would otherwise joyfully assist at each meeting, and that the absence of so many greatly endangers its purpose and interferes with its utility, by failing to promote the constant intercourse of physicians, and the imparting of knowledge and unanimity among them, — therefore

Resolved, That the American Institute of Homœopathy shall issue a tri-monthly Medical Magazine, to be called the Organ of the American Institute of Homœopathy.

The resolution was referred to a special committee of five, consisting of Drs. T. S. Verdi, E. C. Franklin, G. E. Belcher, H. M. Smith and C. J. Hempel.

Dr. E. B. Thomas, from the committee to whom was referred the case of Dr. Neilson, reported as follows:

Resolved, That it is inexpedient for the American Institute of Homœopathy to take cognizance of this case; and we respectfully

and earnestly recommend that all such cases be settled by local organizations.

[Signed,] J. P. DAKE,
E. B. THOMAS,
L. M. KENYON,
C. J. HEMPEL,
E. C. FRANKLIN.

The report was unanimously adopted.

DR. THOMAS offered the following resolution:

Resolved, That our thanks are due to the General Secretary, and the Committee of Publication, for their great labor in preparing, and their good judgment in arranging, as well as the meritorious and excellent taste manifested in the magnificent execution of, the volume of the Transactions of the twentieth session of the American Institute of Homœopathy.

Adopted unanimously.

HOMŒOPATHIC DISPENSATORY.

DR. HEMPEL: I would offer the following resolution:

Whereas There is great need of such a homœopathic dispensatory as will meet with the requirements of our advanced science, and the approval of our State and national organizations, and it is understood that Dr. E. A. Lodge, of Detroit, has such a work ready for publication, — therefore

Resolved, That its proof-sheets be submitted to a committee of one professor from each of the colleges on behalf of this Institute for approval.

DR. SMITH, of New York: I would state there has been a call issued by the homœopathic pharmacies to meet in convention in Philadelphia this month, when the whole matter ought to be arranged. In view of that fact, I move that the resolution be laid over.

DR. MORGAN: I move to amend by referring to the Committee on Nomenclature.

DR. HEMPEL: I cannot accept the amendment, for this reason: We do not know what report this Committee on Nomenclature

may present. The Institute may not accept that report, in which case it would not accomplish what this resolution intends.

Dr. Morgan's amendment was lost.

The resolution was adopted.

DR. SWAZEY offered the following resolution:

Resolved, That the thanks of the Institute be presented to the homœopathic physicians of St. Louis for their very liberal entertainment of the Institute during its session; also, to the press of the city for their courtesy; and to all who have contributed to the success of our meeting, or to the value of our proceedings.

Adopted unanimously.

DR. BAER: I beg leave to present the following resolution:

Resolved, That Congress be memorialized in relation to the introduction of homœopathic practice in the army and navy for those who desire it; and the American Institute of Homœopathy requests the various homœopathic societies in the United States to present petitions accordingly.

The resolution was adopted.

DR. H. M. SMITH: I move that JOHN MOORE, M.D., of Liverpool, England, be elected a Corresponding Member of this Institute.

Motion carried.

ADMISSION OF FEMALE PHYSICIANS.

DR. SWAZEY: I wish to make a remark or two with reference to the petition for a change in the constitution which was presented last year. It was, of course, expected by certain members that it would be called up. It is due to that very respectable minority whom I represented during our last session that I should take some cognizance of the notice which was given of a proposed change of the constitution. We have been under such a pressure of business that I have, for my own part, been unwilling to urge anything upon the Institute which would give rise to protracted discussion. I have, therefore, refrained from

taking up the notice. I now move that it be continued until a future meeting of the Institute.

DR. BEEBE: It seems to me that this question ought to be disposed of, rather than have it hanging over our heads for another year. I move that it be indefinitely postponed.

The motion to postpone was carried, ayes 20, nays 1.

DR. COOKE: Mr. President, I now move that Dr. Swazey be heard.

DR. SWAZEY: The course that has been taken will compel me to occupy the time of the Institute two or three minutes more than I would otherwise have done. In the first place, as a somewhat elderly member of the Institute (having been connected with it from the year 1844), I must confess my utter surprise that there are gentlemen who can, in this summary manner, apply the gag in an important matter. I stand here as the representative of what was last year a very respectable minority. I executed their will in the notice which I then gave. The question, by indefinite postponement, has not been decided, and it must come up again; so what has been gained? All I wished was to pass it quietly over until such time as the Institute would deliberate upon it. It will be recollected, Mr. President, that the longest discussion and the closest vote ever known in the Institute was upon this question. It will, as sure as fate, prevail some time. Perhaps my head will have done aching before that time; but no matter. I am no woman's rights man, but, out of respect to the feelings of many members, I beg leave to offer the following notice:

That the third article of the constitution be amended by adding the words "male and female" after the word "others."

DR. BEEBE: When we have indefinitely postponed a subject, we cannot go to work again and legislate upon that subject.

DR. SWAZEY: This is simply a notice for a change of the constitution, which any member has the privilege of offering.

ADJOURNMENT.

DR. TALBOT: I move that, when this Institute adjourn, it adjourn to meet in Boston on Wednesday, June 9, 1869.

DR. FRANKLIN: I would prefer that the first Wednesday be substituted for the second, for several reasons.

The Secretary stated that, for certain local reasons, it would be more convenient and desirable to the physicians of Boston to have the Institute meet on the second Wednesday, rather than the first.

DR. DUNCAN: I move as an amendment that the Institute meet in Boston on Tuesday, June 8, 1869, and that it hold four days of session, instead of three.

Dr. Duncan's motion was carried.

The President then announced the following bureaus and committees for the ensuing year:

Bureau of Materia Medica, Provings and Pharmacy.

C. WESSELHOEFT, M.D.
W. WILLIAMSON, M.D.
W. E. PAYNE, M.D.
H. L. CHASE, M.D.
S. B. BARLOW, M.D.
E. M. HALE, M.D.
J. P. DAKE, M.D.
G. E. BELCHER, M.D.
J. L. KEEP, M.D.

Bureau of Clinical Medicine.

H. D. PAINE, M.D.
S. M. CATE, M.D.
D. H. BECKWITH, M.D.
S. GREGG, M.D.
P. P. WELLS, M.D.
J. C. BURGHER, M.D.
N. F. COOKE, M.D.
W. H. HOLCOMBE, M.D.
J. HARTMANN, M.D.

Bureau of Obstetrics.

R. LUDLAM, M.D.
H. N. GUERNSEY, M.D.
J. H. WOODBURY, M.D.
T. G. COMSTOCK, M.D.
E. M. KELLOGG, M.D.
J. C. SANDERS, M.D.
T. F. POMEROY, M.D.

Bureau of Surgery.

J. BEAKLEY, M.D.
W. T. HELMUTH, M.D.
G. D. BEEBE, M.D.
E. C. FRANKLIN, M.D.
B. W. JAMES, M.D.
T. F. ALLEN, M.D.
C. T. LIEBOLD, M.D.
J. C. MORGAN, M.D.
M. MACFARLAN, M.D.

Bureau of Organization, Registration and Statistics.

H. M. SMITH, M.D.
H. M. PAINE, M.D.
E. B. THOMAS, M.D.
T. C. DUNCAN, M.D.
F. WOODRUFF, M.D.

Bureau of Anatomy, Physiology and Hygiene.

C. DUNHAM, M.D.
J. H. P. FROST, M.D.
T. P. WILSON, M.D.
J. J. MITCHELL, M.D.
C. W. BOYCE, M.D.
A. R. MORGAN, M.D.
L. M. KENYON, M.D.

Committee on Medical Education.

C. J. HEMPEL, M.D.
D. S. SMITH, M.D.
T. G. COMSTOCK, M.D.
H. B. CLARKE, M.D.
G. D. BEEBE, M.D.

Committee on Finance.

H. M. SMITH, M.D.
E. M. KELLOGG, M.D.
I. T. TALBOT, M.D.
W. WILLIAMSON, M.D.
E. B. THOMAS, M.D.

Committee on Foreign Correspondence.

C. DUNHAM, M.D.
T. S. VERDI, M.D.
I. T. TALBOT, M.D.
B. DEGERSDORFF, M.D.
J. H. PULTE, M.D.

Orator for 1869.

R. LUDLAM, M.D. . . . . CHICAGO.

Alternate.

E. M. KELLOGG, M.D. . . . . NEW YORK.

Necrologist.

S. B. BARLOW, M.D. . . . . NEW YORK.

Committee of Arrangements.

D. THAYER, M.D.
L. MACFARLAND, M.D.
S. GREGG, M.D.
M. FULLER, M.D.
I. T. TALBOT, M.D.

Committee on the Publication of a Journal.

T. S. VERDI, M.D.
E. C. FRANKLIN, M.D.
G. E. BELCHER, M.D.
H. M. SMITH, M.D.
C. J. HEMPEL, M.D.

Committee on a Homœopathic Dispensatory.

CARROLL DUNHAM, M.D.
CONSTANTINE HERING, M.D.
A. LIPPE, M.D.
G. W. BARNES, M.D.
A. E. SMALL, M.D.
J. T. TEMPLE, M.D.

The Institute then adjourned to meet at Boston, on Tuesday, June 8, 1869.

I. T. TALBOT, *General Secretary.*

X.

ANNUAL ADDRESS.

The Homœopathic Idea in Therapeutics.

SOME eighty years ago, a German physician named Hahnemann, a learned man and one well skilled in his profession, discovered, as he believed, the law governing the curative action of medicines. The formula, *similia similibus curantur*, which he adopted to express the law, was not new; but the conditions which he declared necessary for its successful application, and in which lay the merit of his discovery, were so wholly at variance with all established ideas relative to medicines and disease, that his claims were scouted and derided by almost the entire profession. Meanwhile he proceeded, amid obloquy and abuse, to put his method to the test of practical experiment.

The success which he achieved was so striking as to arrest the attention of one after another of his cotemporary physicians, who, in turn, submitting the new doctrine to experiment, were compelled to give in their adhesion to it, though never without incurring the same odium and insult on the part of their fellows which had at first been heaped upon Hahnemann. And so the reform in medicine, called homœopathy, has gone on, constantly repeating the same history, — always accepted by the sincere, patient, and appreciative investigator, derided and scoffed at by those whom pride or stolidity renders incapable of such investigation.

But, in these latter days, those who are cast out from the pale of the self-styled regular profession have multiplied until they threaten to outnumber those who remain behind, — have at any rate become sufficiently numerous to form medical organizations of their own, wherein the medical sciences may be cultivated without sacrificing their choicest product, the art of healing. And thus it happens that here, in St. Louis, to-day we have the twenty-first annual session of the American Institute of Homœopathy, an association which, commencing in 1844 with twenty-five members, now bears upon its rolls nearly one thousand names.

It has been customary for this Association, at each annual session, to set apart one evening for a public meeting; and my predecessors in the office which I now have the honor to occupy have always availed themselves of this opportunity to address the people rather than the profession, and thus from time to time to inform them of the medical "situation." Heartily approving of this course, I shall adopt it on the present occasion, and shall attempt to give some account of the ideas which underlie the controversy that now separates the medical profession into two great parties. It can, I think, be shown that such a wide breach could never have happened as a consequence of the merely incidental differences which popularly are supposed to distinguish the homœopathic from the allopathic practitioner. It is not, for instance, a question of one kind of medicine or another; for in the beginning the medicines were the same, and it is only because homeœpathists have introduced and proved many new remedies unknown to allopathy, that any difference exists at the present time. It is not a question of dose; for Hahnemann had no prejudice against large doses of medicine nor have the allopathists against small ones. The allopathic dilution of prussic acid is about the same as that in common use in homœopathy; and the efficacy of minute doses is freely conceded by allopathic writers, as in the case of natural mineral waters,

which are acknowledged to produce remedial effects which cannot be obtained by their constituents in larger doses. Nor is acceptance or non-acceptance of the formula, *similia similibus curantur*, of itself alone sufficient to account for the difference. This doctrine was not new to medicine when Hahnemann promulgated it, nor do allopathic physicians deny that medicines may sometimes have a homœopathic relation to the disease in which they act curatively. Beneath all these reasons, we shall find that the root of this controversy springs from the peculiar therapeutic views of disease and of the action of medicines which were entertained by Hahnemann, and which rendered his discovery of the therapeutic law possible. The therapeutic ideas of old physic were based upon a materialism in medicine which assumed to account for vital changes by deductions from the application of laws that govern the action of inanimate matter.

Hahnemann saw the fallacy of this, and saw that all such theories of the nature of disease and of the action of medicines must be given up, and that we must deal at once and solely with the facts of vitality. This was the heresy which scientific pride would not brook, and scientific dullness could not appreciate. To them it seemed as though his method, if true, "would be the grave of medical science," as Hufeland, one of his most generous opponents, said. But, in order to understand more clearly how the promulgation of these new ideas in therapeutics tended to excite the disgust and opposition of those who were unable to comprehend them, we must look at their bearing upon medical theory and practice. In order to do this intelligently, let us inquire into the nature of this theory and practice. To the general comprehension, a physician is a person who has learned to cure the sick; but in regard to the kind of knowledge which is acquired for this purpose, or the manner it is applied, little is known. If we examine the curriculum of studies prescribed by all medical schools, we shall find the following, which may be considered the essential elements of a medical education; viz, anatomy,

which treats of the mechanism of the human organization; physiology, of its functions in a state of health; pathology, of changes in the organism under the influence of disease; therapeutics, of the treatment of diseases; and materia medica, of the substances used as medicines. To these studies, which are conducted in separate courses, there are usually added others upon surgery and obstetrics, which, however, are merely specialities of practice; while branches like hygiene, chemistry, botany, etc. may be considered as collateral aids to the general aim. Thus you see that medicine is a fusion of several sciences, any one of which may be pursued separately for its own sake. But you also see that one may be an anatomist or physiologist, and yet know nothing of pathology; or a pathologist, and know nothing of therapeutics. So also, in the exercise of his functions as a physician, one may avail himself of knowledge derived from one of these branches to the exclusion of others: he may, for instance, be summoned to adjust a fractured or dislocated bone, when his knowledge of anatomy alone will be called in play; a patient may present himself for treatment who is suffering from some physiological error, or from a disease which depends upon some unwholesome influence, and a remedy may be found in a hygienic measure which need not involve any knowledge of therapeutics. Again, in certain cases in which pathological knowledge shows a cure to be hopeless, he may find the palliation of suffering the only proper thing to be done.

Now I wish to call attention to the fact that, while the exigencies of medical practice involve so many kinds of knowledge, all of which are needed to qualify the physician for the proper performance of his functions, the question of homœopathy is essentially concerned only with one of these branches of medical study; viz, that of therapeutics. Its influence upon materia medica, though important, is secondary and incidental; so that, in fact, all the difference which naturally follows the introduction of homœopathy centres upon this single point: How shall medi-

cines be selected when used with the intent of curing the sick?

I use the word *cure* here in a restricted sense. Originally the word was synonymous with *care*, so that the title of physician meant one who cared for the sick. At the present time the term *cure* is commonly applied to cases supposed to recover in consequence of some application of medical art, either hygienic or surgical or medicinal. But I intend by it only that use of a medicine which enables the patient to resist the influence of disease and thereby hastens his return to health.

For convenience I also propose to restrict the meaning of the term *therapeutic* to correspond with this use of medicine; though, as in the case of the word *cure*, any means whereby sickness is relieved is commonly called therapeutic. By these restrictions the hygienic or palliative uses of medicines are excluded from consideration, because no difference exists in regard to the principle governing their use, which is solely one of expediency. With these limitations the *therapeutic* use of medicines signifies their administration as specific agents designed to restore health by virtue of their relation to the vital force. By the vital force — or life-force — is meant that principle inherent in the germ of every living organism by which its career is determined, and by which all other forces are co-ordinated and made subsidiary to its growth and proper development. By the specific agency of a medicine is understood that property possessed by any substance that is only to be accounted for, not by its influence upon the functions of life, but by its physical or chemical qualities.

From these premises it follows that, of two physicians engaged in the practice of medicine, one as homœopathist and the other as allopathist, both are supposed to have obtained the same knowledge of the human organism as furnished by anatomy and physiology, the same knowledge of diseases, to be derived from the study of pathology, the same skill in surgery and obstetrics the same familiarly with resources of hygiene and palliative

medicine; and that both physicians make the same use of these kinds of knowledge, while only in therapeutics, and the study of materia medica incident thereto, does their practice differ.*

In allopathic therapeutics (leaving out as already explained the hygienic and palliative use of remedies), we have, as the only scientific procedure for the selection of the proper curative medicine in a given case, what is known as the "rational method." The conditions for its successful application are these: 1st. Such a knowledge of the nature of the disease as shall account for its presence, and show the way in which health may be restored; 2d. Such a knowledge of the nature of medicinal action as shall indicate what remedies are required for this purpose.

Now, nothing can seem more "rational" than this, — that, to cure a patient, we should first "understand the case," as the phrase goes, and next that we should know how a medicine acts. But just here lies the fallacy that has vitiated the study of therapeutics from the beginning of medical history to the time of Hahnemann. To understand the nature of a disease, or how a medicine cures, in the sense here required, is to understand the nature of life itself; and this, philosophically speaking, is one of the ultimate facts of science, — that is, a fact which cannot

* It must not, however, be supposed that the difference is therefore a slight one. It is true that many distinguished modern allopathic authorities, despairing of success with their own method in therapeutics, and astounded at the ever-increasing influence of homœopathic practice, are giving greater prominence than ever before to the importance of hygiene in the prevention and cure of disease, and are decrying the use of drugs as unnecessary. This opinion, however, is generally put forth when the ugly fact of homœopathic success has to be explained, and is generally qualified by the admission that a few remedies *in skilful hands* may sometimes be useful. But every practical physician knows that in the daily round of his duties he is constantly brought face to face with disease which is susceptible of medicinal relief and removal, and he finds the therapeutic question dominate all others, while success therein is recognized as the crowning glory of his art.

be understood. The phenomena or results of life and of disease may be observed, may be classified, and their order and dependence may be known to a certain extent: but this knowledge can only be rendered available for therapeutic use by experiments limited to its own ground; viz, that of vital action and reaction. Yet allopathic therapeutics practically ignores this philosophical fact, and to-day, as for the last two thousand years, there are fruitless attempts to solve questions involving vital phenomena by processes of physics and chemistry; and the pretence is constantly kept up that by such investigations knowledge may be obtained which will inform the physician when and how medicines may be administered in order to secure their curative action. The whole history of medicine is a history of the failure of such methods to advance a knowledge of the therapeutic uses of medicines. The facts that quinine cures some patients who are sick with ague, nux vomica some who have gastralgia, tartar emetic some with croup or lung fever etc., were never discovered by processes of this kind; nor can such relations of medicines to morbid conditions be explained thereby. They are simply facts of vital reaction under the influence of a special stimulus, and their therapeutic significance can be determined only by experiment upon the living organism.

As a consequence of this fallacy in the allopathic method of therapeutic study, we have the result that, instead of ascertaining the conditions under which experience would have shown certain medicines to be capable of curative action, the attention of the profession has been constantly absorbed in the study of the nature of morbid and medicinal action; and thus physiology and pathology have been cultivated at the expense of therapeutics. Meanwhile generation after generation of the sick have suffered every variety of abuse and torture that the changing theories of the schools have brought into vogue.

Take, for instance, the history of the treatment of fever. In the early history of medicine, health was supopsed to depend

on the proper proportion of the four elements, — heat, cold, dryness, and moisture: and this proportion was supposed to be maintained by the proper combination of four humors; viz. blood, bile, black-bile, and phlegm. A fever was thought to be an excesss of the heat element, and to be the result of a superabundance of one of the four humors. The treatment aimed to restore equilibrium between the humors, and whatever was thought likely to do that was prescribed.

After the circulation of the blood was discovered, and it was found that the bile and phlegm were secretions from it, the theory changed, it was then supposed that a fever was a commotion set up in the system by nature to get rid of some poison in the blood. The treatment was designed to aid the poison to get out. Hence the hot drinks and close confinement to favor sweating, the bleedings, purgings, etc., which made such fearful havoc with fever patients for a long period preceding the discovery of homœopathy.

As an illustration of the absurdities incident to this materialistic philosophy in therapeutics, let me read from a highly respectable author of the past century, Ettmuller, who writes concerning the cure of fever in this wise:

"Sometimes we join issue with nature, and, while she performs her work [that is, getting the poison out of the blood], are only busied in removing the impediments that embarrass her, by cleansing the first passages, emptying the blood-vessels, and promoting the precipitation of morbific matter by medicines proper for that purpose. Indeed, when nature departs from her due measures by endeavoring unseasonable evacuations, as in the beginning of a fever, 'tis a perplexed case: for to withstand nature and stop the looseness were to augment the fever; and to suffer it to go on, weakens and disables the patient so that he cannot encounter the disease. In order to solve this difficult knot, let us consider in the first place that nature is forced to these evacuations by the sharpness of the humors, which ought to be corrected by temperate medicines. Blood-letting is frequently enjoined in fevers, but ofttimes it does more harm than good. The general plea for it is that it ventilates and cools the

blood; whereas, on the contrary, the more space that be given to the blood to boil in, the higher it boils."

I have quoted this old author, since it is easier to see the inadequacy of the philosophy of his period than that of our own, as a guide in therapeutics; but these speculations, which seem so ridiculously crude, are not a whit more so than those which are to-day controlling the practice of allopathic physicians. *Braithwaite's Retrospect* is a periodical devoted to a digest of the medical sciences, and pays particular attention to therapeutics. In the number for January, 1866, the leading article (to which attention is called by the editor on account of its importance) is upon the treatment of zymotic diseases by the alkaline sulphites. In this article it is maintained that, whereas a large class of diseases probably depend upon a process in the blood like that of fermentation; and whereas alkaline sulphites check fermentation in wine, cider, etc., — therefore it is proposed to give sulphites in zymotic (or fermenting) diseases. In other words, as sulphurous acid stops wine and cider from fermenting, therefore, as the blood in some diseases seems to ferment, it is proper to administer it as a medicine. How much better is this than bleeding to cool and ventilate the blood in fever (which, by the way, suggests Sydney Smith's way of cooling, — for one to take off his flesh and sit in his bones), or to refrain from bleeding lest the boiling blood have more space to boil in!

The next article in this journal treats of the use of the hypophosphites of lime, soda, and potash in remittent fever. These remedies are well known as a recent novelty in the allopathic treatment of consumption. They were introduced by a Dr. Churchill upon the "assumption," as he says, that consumption depends upon a lack of phosphorus in an oxydizable condition in the system. This paper, however, goes to show that the hypo-phosphites cure remittent fever, which, not being "assumed" to depend upon a lack of phosphorus, requires and receives 'assumption" of another kind.

In the same number is an article on cholera, in which several authorities are quoted in order to show the latest views concerning the nature and treatment of the disease. The editor congratulates the profession upon the improved knowledge obtained since 1832 of the nature and treatment of cholera. "We have," he says, "learned how to avoid opium, stimulants, and other kinds of treatment, which used to be the fashion: we have learned that, from some mysterious poison acting at first apparently on the organic nerves, and then on many of the cerebro-spinal nerves, the arterial system becomes violently and spasmodically contracted, so as to collect nearly all the blood in the great central veins, causing the most rapid collapse, and almost completely impeding the circulation through the lungs; this diminishes the supply of oxygen, and prevents the oxydation of those constituents of the blood requiring that element." From all of which the conclusion is, that cholera is to be considered a kind of spasm. The "nature of the disease" having been thus determined, the indications for treatment are to relax the spasm. Bleeding will do this, and in the first stage (*i. e.* before the patient has become prostrated by the disease) can be borne, but in the second stage fainting and relapse follow it. On the whole, the editor thinks bleeding will never be a favorite remedy, though undoubtedly relaxing. Emetics are more or less useful, but chloroform it is thought will supersede bleeding and emetics. Its relaxing effects can be easily watched, and, if reaction does not come on, stimulants can be given. That is, if the patient be likely to die from relaxation, he may be tightened up again.

These are fair samples of the therapeutic reasoning upon which allopathic practice is based. If it were necessary to show how utterly impractical it is, I could quote you plenty of equally high authority which from the same premises deduces totally different conclusions and prescribes totally different treatment. Thus Dr. Austin Flint, of New York, who has just written

one of the ablest allopathic works on the practice of medicine ever published, takes directly the opposite ground from that in Braithwaite, and relies upon opium in cholera, because it acts as an astringent, and thus stops the evacuations.

I might continue to illustrate this mode of reasoning upon therapeutics at any length, for allopathic literature is filled with it. It is, however, only necessary to call attention to the fact that, while these speculations are always going on in the allopathic school, and swaying its treatment to accord with every vagary of which the mind of man is capable, the nature of a disease, and the manner in which a medicine cures, is just as far from being understood as ever. But this fallacy has not merely obscured the true course for the advancement of therapeutic science: it has proved a positive obstruction. Whenever a medicine has been found by accident* to have curative power over certain morbid states, its introduction into regular practice has generally been attended by the greatest difficulty.

If the therapeutic method in vogue had been sound, of course all such discoveries would have been welcomed by the profession, — would have found their proper place in the science, and advanced it. Instead of this, they have generally caused embarrassment, and their claims have sometimes been resisted to the last degree of obstinacy. Witness the history of the introduction of Peruvian bark, from which quinine is obtained.

This medicine was introduced into Europe about 1640, by the wife of the Spanish viceroy of Peru, the Countess of Cinchon. She had suffered from an intermittent fever (which had baffled the skill of her physicians), had received this medicine from the Indians, and had been cured. Grateful for its benefits, and anxious to extend a knowledge of its excellence, she distributed it widely among the poor, and it soon obtained great

* Stillé, one of the most recent and distinguished authors of allopathic materia medica, declares that the virtues of all medicines have been discovered by accident.

celebrity. But the medical faculty raised such an opposition to it that its general use would have been prevented had not Pope Innocent X. ordered an examination into its merits. The report thereupon being favorable, it was taken up by the Jesuits, who introduced it throughout Europe. Among other incidents attending its introduction is the following: A quack named Talbor astounded London by his cures of intermittent fever. His success was so great that the College of Physicians and Surgeons attempted to suppress him, but the King issued a mandate forbidding the College to molest or disturb him in his practice. After becoming famous in London, he went to Paris, where he had similar success. The following story is told of him: One day, being called to a patient, he was asked by the physician in attendance, who wished to expose Talbor's ignorance, "What is a fever?" Talbor answered, "A fever is something which I cannot define, but which I can cure; while you, perhaps, may define, but cannot cure it." His secret was bought by Louis XIV. at a great price, but proved to be nothing but the bark which has received the name of Cinchona, after the Countess of Cinchon.

But, while thus asserting the utter worthlessness of the allopathic therapeutic method, I do not wish to be understood as saying that allopathic physicians never cure their patients. It is possible to believe that they sometimes do. Most commonly it is by resorting to what they call specific or empirical remedies, — conceding by this appellation that the action of such remedies is not understood. Their use is justified on the ground of experience alone, and no attempt is made to account for the manner of their action. This is very sensible; but what might seem a little queer to anybody but a regular old-school doctor is the fact that these exceptional remedies are considered by the best authorities among themselves to embrace about all that are good for anything. Renouard, in his History of Medicine, when treating of therapeutic systems, says that "all

schools" (meaning the different varieties among the allopaths) "agree in admitting rational modes of medication, which latter they also call empirical; but what is oddest in this classification is, that the modes of medication called irrational are generally the most efficacious." Dr. Oliver Wendell Holmes, after having excepted specifics and palliative medicines, says, "If the whole materia medica, *as now used*, could be sunk to the bottom of the sea, it would be all the better for mankind, and all the worse for the fishes."

In addition to the cures effected by allopathic physicians with specific and empirical remedies (wherein the homœopathic relation is generally very apparent), there occasionally happens what might be called a chance cure, when, notwithstanding the absurd theory upon which the prescription is based, the homœopathic medicine is actually given, and in a dose sufficiently moderate to admit of vital reaction. The following case is an illustration: I was called to a lady who was subject to attacks of disorder of the digestive organs, among the symptoms of which nausea was prominent. I gave her ipecac in a minute dose, which promptly relieved her. She afterwards came to me to know what the medicine was, saying that she had previously employed an allopathic physician, who always had to give an ipecac emetic to clear her stomach before she got relief, and it was because she dreaded this procedure that she had sent for me. She was not a little surprised to learn that she had taken ipecac in so small a dose that she did not recognize it. In this case it will be perceived that the allopathic prescription of ipecac was based upon the theory that something must be removed from the stomach in order to relieve the patient, and ipecac was used as a *mechanical* means to this end. The result of the homœopathic prescription showed that there was no need of removing anything, as relief came more promptly without vomiting than it had done with it. The use of tartar emetic by allopathic physicians, in diseases of the respiratory organs par-

ticularly, is frequently homœopathic, and sometimes curative. It would have the latter virtue much oftener were it not commonly given in such large doses, in order to suit some theory, that it is about as liable to kill as to cure, and even more so, according to Dr. Hammond, who, you remember, while Surgeon-General, forbade its use, as well as that of calomel, in the army. And, by the way, Dr. Hammond deserved great praise for that action; it was evidence at once of his humanity and his courage. In the sight of his great responsibility, he dared to do what the safety of the army required, at the sacrifice of his professional pride and of the approbation of his medical colleagues. But what a criticism upon allopathic therapeutics his action afforded! The army medical corps was made up of graduates of *regular* medical colleges, appointed after examination in the *regular* medical tactics; and yet these trained soldiers of allopathy, when brought into the presence of the enemy they came to conquer, had to be stripped of some of their most effective weapons, lest they should strike down more friends than foes.

It is from the experimental knowledge derived from these chance cures of which I was speaking, and the caution which is inspired by a failure of allopathic theories, that the skill is acquired which is popularly accorded to the old experienced physician, and which does indeed distinguish him most favorably from the young Sawbones who, fresh from his studies, essays, at great risk to all who come in his way, to make the theories he has learned apply in practice.

But this last sort of allopathic success — these chance cures, as I have called them — remind one of Charles Lamb's story of the origin of roast pig. Many of you have doubtless read it, but I trust to be pardoned for a brief abstract, for the benefit of any who have not. He affects to have derived his information from a Chinese manuscript, wherein it is related that the son of a swineherd having accidentally set fire to the cottage in which

they lived, a litter of pigs perished therein. In handling one of these untimely sufferers, the boy burned his fingers, and to cool them applied them to his mouth, and for the first time in his life, in the world's life indeed, he tasted crackling! The father, returning, met with a similar experience, which for a time was kept a secret; but, as often as the sow farrowed, his house was burned. Finally the father and son were watched, arrested, tried, and — the jury getting a taste of the roast pig — acquitted. But the secret was divulged, the thing took wings, and nothing but fires were seen in every direction, until at length a sage arose who made the discovery that the flesh of swine, or indeed of any other animal, might be cooked without the necessity of consuming a whole house. Then first began the rude form of a gridiron. Roasting by the string or spit came in a century or two later. By such slow degrees, concludes the manuscript, do the most useful, and seemingly the most obvious, arts make their way among mankind. With which conclusion I think we may safely agree. And, so long as *ipecac* and *tartar emetic* are given in doses that vomit; mercury, till its poisonous influence is seen in the mouth; quinine, till there is vertigo or delirium; strychnine, till there are spasms; arsenic, till the eyes are bloodshot; and so on, as allowed by the regular practice, — we may assume the allopathic art of cure to stand at an epoch corresponding to that marked in the art of cookery when the house was burnt to roast the pig.

Allopathic therapeutics, to sum up, is based upon a method whose conditions are not susceptible of scientific application, and its practice is saved from utter failure only by a resort to empirical measures of uncertain value.

We will now see how homœopathy answers the therapeutic question. It avoids the fallacy which I have pointed out as the source of failure in the allopathic method: it recognizes the relation between the patient and the medicine that cures as a purely vital one. It accepts the conclusion, which necessarily

follows, that the essential nature of the process is unknowable; and therefore it devotes itself to the proper function of therapeutic science, which is to determine, by vital tests alone, the curative relation which may exist between any medicine and any form of disease.

According to this test, a remedy for a disease is to be found by comparing the symptoms of the patient in a given case with those which the various medicines are capable of producing upon a well person, since it has been found by experiment that the symptoms which a medicine may cause in health are like those which it will cure in disease. This solution of the problem, it will be seen, is practicable and scientific, for it deals with the question upon its own ground of vital action and reaction.

Disease, from the therapeutic standpoint, is no longer an abstraction to be speculated upon, or a man of straw under some pathological name, to be overcome by a physical or chemical force, but is simply to be considered as the actual condition of the individual patient, and the study will consist in a comparison of the particular symptoms which the sickness may present with those which characterize the action of particular medicines.

The medicines of homœopathy are not chosen for their physical qualities nor their chemical affinities, nor for the speculative properties which are imputed to them, like that of sedative, tonic, etc., but solely for the special effects which they are known to produce on living men and women.

This method of considering the relations of medicines and diseases would have the same validity, whether the formula, *similia similibus curantur*, were the correct one for therapeutics or not. The question whether the medicines do or do not act homœopathically, I do not propose to discuss, if indeed the question admit of discussion.

If the statistics which have been gathered from all available

sources, if the ever-accumulating testimony of the thousands of physicians and millions of patients who have made the experiment be not conclusive upon this point, there is nothing to be done but to wait for still further evidence. If we compare the practical results of this method with that of allopathy, we shall find that, whereas the allopathic method has failed to discover the virtues of any medicines (this statement, remember, is that of Stillé, one of the most respectable authors of allopathic materia medica), the homœopathic method has added to the resources of the materia medica a knowledge of the curative uses of medicines so vast that all previous knowledge is as nothing compared with it. Take, for instance, the drug called aconite. This medicine has been known to the medical profession since the year one of the Christian era. Before its homœopathic proving, it had no standing at all as a curative agent; now it is a household word throughout the bounds of civilization, and every one knows something of its virtues. The same may be said of many other medicines. Dr. Watzke, a German author, in a recent monograph on colocynth, says: "The number of works on materia medica, old and new, thick and thin, which I consulted in pursuit of my remedy, amount to at least fifty. . . . What I found in the first huge pig's-skin folio of Dioscorides respecting colocynth, that same I found in the whole set of followers; . . . . hypothetical healing virtues, not a trace of one positive fact, of one physiological foundation, till we come to Hahnemann." There are this day in use by homœopathists scores of medicines, with curative properties as well known and as important as those of any in the whole materia medica, whose virtues — nay, whose very names — are utterly unknown among allopathists.

On the other hand there is not a fact relating to the physiological or clinical action of a medicine, reported in allopathic literature, but what is seized at once by homœopathic writers, and made to take its proper place in the homœopathic materia

medica. These things illustrate the tendency of the ideas which animate the two parties in medicine, and explain the antagonism which they present. The old school, with its false therapeutic method, drifts hopelessly towards scepticism in the remedial virtues of drugs, and looks with contempt and hatred upon the rapidly increasing body of heretics, who, driven from its own ranks, have the impertinence to found organizations of their own, to assert the superiority of a new method in therapeutics, and to maintain this assertion by a most triumphant success.

The new school, inspired with renewed faith in the curative powers of medicine, finds in the experience of the past, no less than in that of to-day, testimony to the truth of its doctrine. Alert, progressive, it hopes and expects to give to therapeutics a scientific form worthy of its high function, and thus to crown the arch of medical sciences with a keystone which shall complete its symmetry, and fix it firmly for all future time. But it is not for its positive benefits alone that the world has reason to regard the introduction of the homœopathic method in therapeutics with interest and gratitude. Think of the abuses which it drives before it,—the deadly blood-lettings, the mercurial poisonings, the emetics, the purgings, the blisterings, which are fast passing away forever!

Indeed, whether its claims of positive power to prolong life, to abridge the periods of disease, and alleviate suffering, be allowed or not, humanity will have cause to count it no small gain. Ignorance in the guise of medical science is no longer suffered to add these tortures to the pangs of disease.

XI.

TREASURER'S REPORT.

E. M KELLOGG, TREASURER, IN ACCOUNT WITH THE AMERICAN INSTITUTE OF HOMŒOPATHY.

Dr.			Cr.		
1868			1867		
June 1.	To cash received from members for dues, diplomas, etc.	$1,644 00	June 7.	By Balance from 1866,	$145 68
	To Balance due the Treasurer,	90 52	" 8.	By Balance paid Secretary,	217 59
		$1,734 52	" "	By express charges from Boston,	1 50
			" 20.	Bill of T. Holman for printing,	12 75
			" 29.	Bill of reporter,	60 00
			Oct. 31.	Bills of A. S. Seer (printing),	10 50
			1868		
			June 1.	By expenditures of Treasurer for postage, stationery, etc,	44 00
			" "	By Bill of Secretary for do.,	242 50
					$734 52
			June 4.	By Bill of Secretary for printing,	1,000 00
					$1,734 52

The Auditing Committee would report that they have examined the accounts and vouchers of the Treasurer, and find them correct.

A. E. SMALL.
E. C. FRANKLIN.
GEORGE E. BELCHER.
SAMUEL GREGG.
ROBERT McMURRAY.

XII.

CONSTITUTION, AND BY-LAWS.

CONSTITUTION.

ARTICLE I.

THIS Association shall be styled the AMERICAN INSTITUTE OF HOMŒOPATHY.

ARTICLE II.

The object of the Institute shall be the improvement of the science of medicine.

ARTICLE III.

The Institute shall be composed of those physicians who are already members, and of such others as may be hereafter duly chosen in conformity with its By-laws.

ARTICLE IV.

The officers of the Institute shall be a President, a Vice-President, a General Secretary, a Provisional Secretary, and a Treasurer, with such other officers as shall be designated by the By-laws, to be chosen at such time, in such a manner, for such a period and with such duties, as those by-laws shall ordain.

ARTICLE V.

The Institute shall have and use one common seal, with a suitable device and inscription.

ARTICLE VI.

This Constitution may be altered or amended by a vote of two-thirds of all the members present at the regular annual meeting, provided that notice of such alteration or amendment shall have been given in writing at a previous annual meeting of the Institute.

BY-LAWS.

ARTICLE I.

The Institute shall hold at least one session in each year, at such time and place as may be determined upon from time to time.

ARTICLE II.

SECT. 1. The officers shall be elected at each session by ballot, and shall remain in office until others are chosen.

SECT. 2. The officers of the Institute — viz, the President, Vice-President, General Secretary, Provisional Secretary, and Treasurer — shall constitute an Executive Committee, which shall arrange the order of business at the meetings of the Institute; attend to matters of business not otherwise specially provided for; and perform such other duties as may by vote of the Institute devolve upon it. It shall also constitute the Publication Committee.

ARTICLE III.

The President shall preside at the meetings of the Institute, preserve order therein, put all questions, announce the decisions, and appoint the committees not otherwise ordered.

ARTICLE IV.

The Vice-President shall assist the President, and, in his absence, perform his duties.

ARTICLE V.

The General Secretary shall keep a record of the proceedings of the meetings; answer all letters addressed to the Institute; open and maintain such correspondence as may tend to advance its interests; give proper notice of the meetings of the Institute; notify candidates of their election; and sign certificates of membership.

ARTICLE VI.

The Provisional Secretary shall assist the General Secretary, and, in his absence, perform his duties.

ARTICLE VII.

The Treasurer shall collect all moneys belonging to the Institute; make all necessary disbursements; and report annually in writing.

ARTICLE VIII.

At each session of the Institute there shall be elected, by ballot, a board of five Censors, who shall receive and examine the credentials of candidates, and report to the Institute, for election, such as may be found properly qualified.

ARTICLE IX.

SECT. 1. Any person who shall have pursued a regular course of medical studies, according to the requirements of the existing medical institutions of our country, and shall have obtained a certificate of three members of this Institute that he has thus complied with the above requirements, and sustains a

good moral character and general standing, — addressed to the Board of Censors, and by them satisfactorily found qualified in the theory and practice of homœopathy, and so reported to the Institute, — may be elected a member thereof; and, upon the payment of two dollars, shall receive a certificate of such election.

SECT. 2. Properly accredited delegates, being physicians, shall be admitted during the session of the Institute to all the privileges of members, except voting and eligibility to office, on the following basis:

First. From every association composed of more than fifty members from different States, two delegates, with an additional delegate for every twenty members.

Second. From every State society, two delegates, with an additional delegate for every twenty members.

Third. From every county or local society, one delegate.

Fourth. From every college, hospital, or dispensary actually established, one delegate.

Fifth. From every medical journal published, one delegate.

Such delegates shall be elected for the term of one year.

It shall be their duty to present to this Institute, through its proper bureaus, a clear synopsis of the doings of their respective associations.

SECT. 3. Of State societies represented in the Institute, the Presidents shall be *ex officio* Vice-Presidents, and the Recording Secretaries shall be *ex officio* Corresponding Secretaries, of the Institute. It shall be the duty of these officers to communicate to the General Secretary any facts or information concerning the condition of these societies, and the progress of homœopathy in their several States.

SECT. 4. Any foreign homœopathic physician may be elected a Corresponding Member of the Institute at any meeting; and the Institute may, at any annual meeting, elect as Honorary Members, not to exceed five in one year, any foreign homœo-

pathic physicians who may be judged worthy, from their superior attainments in medicine; provided that the names of persons proposed for Honorary Membership shall have been presented at a previous annual meeting. Such Corresponding and Honorary Members shall not be entitled to vote, nor be eligible to office.

SECT. 5. Members shall be required to pay annually the sum of three dollars towards defraying the expenses of the Institute.

ARTICLE X.

SECT. 1. There shall be a Bureau of Materia Medica, Pharmacy, and Provings, consisting of nine members, which shall obtain facts relating to the materia medica and pharmacy; and institute, collect, and arrange provings of drugs.

SECT. 2. There shall be a Bureau of Clinical Medicine, consisting of nine members, which shall collect facts relating to clinical medicine generally, and especially to any endemic or epidemic diseases which may exist in the country.

SECT. 3. There shall be a Bureau of Obstetrics, and Diseases of Women and Children, consisting of seven members, which shall collect and report to the Institute facts and observations on subjects pertaining thereto.

SECT. 4. There shall be a Bureau of Surgery, consisting of nine members, which shall collect all improvements in surgery and surgical means, especially in connection with homœopathic treatment.

SECT. 5. There shall be a Bureau of Organization, Registration, and Statistics, which shall keep a register of all homœopathic physicians, or those who claim to be such, in the United States, distinguishing those who are members of the Institute, and also members of State societies; prepare a list of all State and local societies, colleges, hospitals, dispensaries, and journals, with their organization; and collect any statistics regarding homœopathy, its status and progress.

SEC. 6. There shall be a Bureau of Anatomy, Physiology, and Hygiene, consisting of seven members, which shall report to the Institute the advances made in these departments of medical science.

Each of these Bureaus, unless otherwise provided, shall consist of five members, to be appointed annually by the President with the advice of the other members of the Executive Committee; and, if any member of a bureau shall resign, or decline to serve, the Chairman of the bureau shall fill the vacancy, and notify the General Secretary of the fact.

The Chairmen of similar bureaus in State societies, represented in the Institute, shall be *ex officio* Corresponding Members of these bureaus.

ARTICLE XI.

Diplomas shall be granted to such as are already members of the Institute, on the payment of one dollar, and to new members on the payment of two dollars.

ARTICLE XII.

These By-laws may be altered or amended by a vote of a majority of members present at any annual meeting.

XIII.

RESOLUTIONS.

Adopted May 14, 1846.

Resolved, That this Institute recommends the formation of local homœopathic societies, on the basis of the Institute.

Resolved, That each local society be recommended to appoint a bureau for the augmentation and improvement of the materia medica, whose duty it shall be to send to the central bureau information in relation to the following topics:

1. The effect which may be observed from the trial of new remedies, whether in health or disease; stating the precise localities of the symptoms, the time of day at which they occur, with all the attending circumstances and conditions.

2. New symptoms, either pathogenetic or curative, of medicines already or not fully tried, which are clearly ascribable to those drugs; with particulars of such cases.

3. Symptoms of remedies which have been most frequently confirmed in practice; also any remarkable coincidence in popular practice, — especially in cases of poisoning.

Resolved, That each local society is expected to report itself annually to the Institute.

Resolved, That each member of the Institute be earnestly desired to make trials of drugs upon himself.

Adopted June 13, 1850.

Resolved, That candidates hereafter admitted to membership in the Institute, who may have received a diploma from some regu-

larly established medical college, or institution legally authorized to confer such degree, shall have the title M.D. affixed to their names in all the publications of the Institute; and all who have not such degree of Doctor of Medicine, but are eligible to membership according to the seventh article of the by-laws, shall have prefixed the title of Dr.; and the Board of Censors are hereby instructed so to report their names to the Institute.

Resolved, That, in the opinion of this Institute, all methods of arriving at the curative properties of a drug, except by means of its pathogenetic effects, are uncertain.

ADOPTED JUNE 12, 1851.

Resolved, that this Institute consider it the duty of every member to make some written communication at every annual meeting upon some matter pertaining to the general interests of homœopathy.

Resolved, That members of the Institute who may change their place of residence are hereby requested to give notice of such change to the General Secretary.

Resolved, That individuals proposing to become members of the Institute shall subscribe their names, if present, or, if absent, the Secretary to be authorized to add such names and place of residence, to the Constitution and By-laws, previous to receiving the certificate of membership.

ADOPTED JUNE 8, 1853.

Resolved, That the members of the Institute who shall sign the certificate of an applicant for membership shall state upon the certificate the name of the medical college at which such applicant shall have graduated.

ADOPTED JUNE 8, 1854.

Resolved, That all committees appointed to report on scientific subjects, failing to report within one year after their appointment, shall be discontinued, except by a vote of two-thirds of the members present.

Resolved, That we regard the homœopathic law as co-extensive with disease, and that a resort to any other medicinal means than those pointed out by the law, *similia similibus*, is the result, in part, of the incompleteness of our materia medica, but mainly the result of a want of sufficient knowledge on the part of the physi-

cian of those remedies already possessed by our school; and not of an insufficiency of the homœopathic law.

Resolved, That the pharmaceutists of the homœopathic school be recommended to use, in the preparation of drugs by trituration, the proportion of ten grains of the drug to ninety grains of sugar of milk; and, for the sake of uniformity, to retain the numerical designation adopted by Hahnemann, and continued by the majority of homœopathic physicians.

ADOPTED JUNE 7, 1855.

Resolved, That the Institute cannot view the advertising of remedies as nostrums, or the combining of several medicines in one prescription, in any other light than as irregular practice, and subversive of the best interests of homœopathy; and that we will not tolerate in our membership one guilty of such practice.

ADOPTED JUNE 5, 1856.

Resolved, That the Proceedings of the Institute, published by the General Secretary, be withheld from all members of the Institute whose arrearages or dues shall amount to more than two dollars at the next meeting.

Resolved, That, in accordance with the usage and dignity of scientific bodies, which very properly discountenance all extraordinary efforts on the part of the members of such bodies to enhance individual interest, we, as an associated scientific body, will discountenance all like extraordinary efforts on the part of the members of this Institute; and, whenever such cases come to our knowledge well authenticated, we will sever such members from our connection, as no longer worthy of our sympathy and fellowship.

ADOPTED JUNE 4, 1857.

Resolved, That members in good standing who, from advanced age, or from other causes of honorable mention, shall retire from the practice of medicine, may retain membership, and be exempt from the payment of annual dues.

Resolved, That it is the duty of the American Institute of Homœopathy to extend a fostering care to the homœopathic medical colleges of the United States, and exert its influence in direct-

ing students of medicine, who are seeking admission to the honors of the profession, to their halls for instruction.

Resolved, That the American Institute of Homœopathy does not necessarily indorse the doctrines contained in the reports of committees by accepting and publishing such reports with the proceedings.

ADOPTED JUNE 3, 1858.

Resolved, That all papers received by the Institute, which are ordered to be placed on file, be referred to the General Secretary, to be used as he may think proper in making up his report of the proceedings of our annual meetings.

ADOPTED JUNE 2, 1859.

Resolved, That, in all publications of the Institute, whenever attenuations, dilutions or potencies are mentioned, the centesimal scale is implied, unless a different scale is expressed.

Resolved, That, in the case of such papers ordered for publication as are objectionable on account of their length, the Publishing Committee may, with the consent of the authors, abbreviate the same, or suspend the publication thereof until otherwise instructed.

Resolved, That, a collection of well-digested clinical facts being of importance to the interests of homœopathy, the members of this Institute are requested to furnish the committees appointed to report on medical subjects with an abstract of such cases of importance, occurring in their experience, as relate to any of those designated subjects; and that the publication of the same is authorized, provided it can be effected without subjecting the Institute to pecuniary responsibility.

ADOPTED JUNE 7, 1866.

Resolved, That members who are three years in arrears, and who do not pay within one year after being so notified by the Treasurer, shall be considered as having forfeited membership, and their names shall be stricken from the list.

Resolved, That, while we approve the establishment of life-insurance companies which make a distinction in favor of the patrons of homœopathy, and, while we desire to encourage such organizations, nevertheless, with a view to impartiality, we hereby forbid the use of the name of the American Institute of Homœopathy in any manner calculated to advertise or promote the interests of one such company in preference to another.

ADOPTED JUNE 7, 1867.

Resolved, That, in the organization of life-insurance companies which discriminate in favor of practical homœopathists, we recognize an important instrumentality, which, by showing the superiority of homœopathic treatment, will contribute to the more rapid adoption of the principles of medical science promulgated by the illustrious Hahnemann; and that, whenever practicable, the members of this Institute will give to such organizations a united and cordial support.

ADOPTED JUNE 5, 1868.

Resolved, That, in the meetings of the Institute, the first business in order, after completion of the annual organization, shall be the presentation of reports of Bureaus and of all other scientific papers; and that the miscellaneous business shall follow the same.

XIV.

MEMBERS.

The ? denotes that the residence is doubtful; the figures show the date of membership.]

Members are requested to inform the General Secretary of any change in the address of any of the members.

The following resolution, passed June, 1866, went into effect June, 1867:

Resolved, That members who are three years in arrears, and who do not pay within one year after being so notified by the Treasurer, shall be considered as having forfeited membership, and their names shall be stricken from the list.

ALABAMA.

1844. Lingen, George, M.D.....Mobile.

CALIFORNIA.

1867. Albertson, J. A., M.D.....San Francisco.
1850. Clark, J. K., M.D.....Sacramento.
1858. Dinsmore, J. Pitman, M.D.....8 O'Farrell St., San Fran.
1860. Fox, John W., M.D.....San Francisco.
1859. Geary, John F., M.D.....632 Howard St., San Francisco.
1867. Poulson, Peter William, M.D..12 Montgomery St., San Fran.

CONNECTICUT.

1857. Bell, William C., M.D.....Middletown.
1867. Brown, Henry P., M.D.....Waterbury.
1867. Browne, Gardner S., M.D.....Hartford.
1859. Bulkley, Dr. William E..... .....Danbury.
1851. Dennison, Jeremiah T., M.D.....Fairfield.
1851. Foote, Charles C., M.D.....New Haven.
1850. Foote, Elial T., M.D..... ....New Haven.
1854. Green, Geo. S., M.D.....Hartford.
1867. Holcomb, N. Webster, M.D.....Farmer's Village.
1867. Knight, Elam C., M.D.....Waterbury.
1848. Norton, Lucian H., M.D.....Bridgeport.
1867. Phillips, Albert William, M.D.....Birmingham.

1849. Rodman, William W., M.D. . . . . New Haven.
1848. Skiff, Charles H., M.D. . . . . New Haven.
1858. Stone, Henry E., M.D. . . . . Fairhaven.
1867. Swift, Solomon E., M.D. . . . . Colchester.
1848. Taft, Charles A., M.D. . . . . Hartford.
1867. ?Wadsworth, T. D., M.D. . . . . Southington.
1859. Wilson, G. H., M.D. . . . . West Meriden.

DELAWARE.

1867. Negendank, Augustus, M.D. . . . . Wilmington.

DISTRICT OF COLUMBIA.

1853. Brainerd, Jehu, M.D. . . . . Washington.
1867. Hale, Wm., M.D. . . . . 213 Penn. Ave., Washington.
1844. Piper, J. R., M.D. . . . . 382 H. St., Washington.
1867. Sonnenschmidt, C. W., M.D. . . . . Washington.
1858. Verdi, Tullio S., M.D. . . . . 268 G St., Washington.

GEORGIA.

1867. Cleaveland, William L., M.D. . . . . Atlanta.
1868. Hunt, Samuel P., M.D. . . . . Augusta.
1859. Orme, F. H., M.D. . . . . Savannah.

ILLINOIS.

1868. Bacmeister, Theodore, M.D. . . . . Toulon.
1868. Bancroft, Walton, M.D. . . . . La Salle.
1867. Barker, William C., M.D. . . . . Waukegan.
1868. Barrows, Geo. S., M.D. . . . . Rockford.
1857. Bartlett, A. R., M.D. . . . . Aurora.
1857. Beebe, Gaylord D., M.D. . . . . Chicago.
1867. Bell, James S., M.D. . . . . Joliet.
1867. Brooks, John B., M.D. . . . . Geneseo.
1867. Bumstead, S. J., M.D. . . . . Pekin.
1857. Colton, D. A., M.D. . . . . Chicago.
1854. Cooke, N. F., M.D. . . . . 182 N. State St., Chicago.
1866. Duncan, T. Cation, M.D. . . . . Chicago.
1868. Garvin, J. Paul, M.D. . . . . Alton.
1865. Hale, Edwin M., M.D. . . . . 65 Twenty-second St., Chicago.
1868. Hedges, S. P., M.D. . . . . Chicago.
1868. Hempstead, W. C. F., M.D. . . . . Virden.

1857. Holt, Aaron P., M.D.....Lyndon.
1867. Hoyne, Temple S., M.D.....Chicago.
1868. Jackson, W. M., M.D.....Chicago.
1868. Johnson, P. E., M.D..... Alton.
1857. Kellogg, John L., M.D.....Chicago.
1865. Kneipcke, E., M.D..... Chicago.
1868. Loelkes, George, M.D..... Belleville.
1868. Lord, Frederic A., M.D.....Chicago.
1868. Ludlam, Edw. M. P., M.D.....Chicago.
1857. Ludlam, Reuben, M.D.....Chicago.
1868. Mann, O. H., M.D.....Evanston.
1867. Mason, S. R., M.D.....Sheffield.
1848. Miller, Adam, M.D.....Chicago.
1866. Mitchell, J. S., M.D.....66 Randolph St., Chicago.
1867. Munsey, Barton, M.D..... Virden.
1867. Nute, T. Riker, M.D.....Chicago.
1867. Pratt, Leonard, M.D.....Wheaton.
1857. Shipman, Geo. E., M.D ..... Chicago.
1846. Small, Alvin E., M.D.....124 S. Clark St., Chicago.
1868. Small, Alvin E., jr. M.D.....124 S. Clark St., Chicago.
1868. Small, Henry N., M.D..... 124 S. Clark St., Chicago.
1848. Smith, D. S., M.D..... Chicago.
1867. Wilbur, C. A., M.D.....Chicago.

INDIANA.

1867. Baer, O. P., M.D..... Richmond.
1868. Eggert, William, M.D..... .Indianapolis.
1865. Holland, H. N., M.D.....Jeffersonville.
1853. Hutchinson, J. B., M.D..... Madison.
1868. Peck, Edwin H., M.D.....Vincennes.
1868. Whiting, Samuel C., M.D .....Vincennes.

IOWA.

1866. Coggswell, C. H., M.D..... Clinton.
1850. Foote, George F., M.D.....Dubuque.
1857. Guilbert, Edward A., M.D.....Dubuque.
1867. Hill, Robert L., M.D.....Dubuque.
1867. Pearson, Clement, M.D.....Mt. Pleasant.
1868. Seidlitz, Geo. N., M.D .....Keokuk.

KANSAS.

1868. Mayer, Martin, M.D..... Leavenworth.

KENTUCKY.

1860. Cushing, J. F., M.D ....Covington.
1865. Gunkle, Henry, M.D..... Newport.
1865. Haynes, J. Russ, M.D.....Newport.
1865. Hunt, W. H., M.D.... ..... Covington.

LOUISIANA.

1846. Burritt, A. H., M.D..... ..... New Orleans.
1860. Holcombe, Wm. H., M.D.....229 Camp St., New Orleans.

MAINE.

1868. Bell, James B., M.D..... .....Augusta.
1846. Bradford, Richmond, M.D.....Auburn.
1846. Clark, Eliphalet, M.D..... ....Portland.
1848. Cummings, J. M., M.D.....Portland.
1847. Dodge, Moses, M.D..... .....Portland.
1859. Eaton, Hosea B., M.D..... .....Rockport.
1848. Gallupe, William, M.D..... Bangor.
1867. Hinks, E. F., M.D..... .....Thomaston.
1859. Jefferds, George P., M.D.....Bangor.
1868. Morrill, G. H., M.D.....Augusta.
1867. Payne, Frederick W., M.D.....Bath.
1844. Payne, William E., M.D.....Bath.
1858. Pulsifer, M. R., M.D.....Ellsworth.
1867. Seymour, D. E., M.D.....Calais.
1847. Shackford, Rufus, M.D..... .....Portland.
1859. Thompson, W. L., M.D.....Augusta.

MARYLAND.

1860. Buckner, Charles S., M.D.....12 Cathedral St., Baltimore.
1868. Doran, Charles R., M.D.....Hagerstown.
1852. Hammond, Milton, M.D. .....57 N. Paca St., Baltimore.
1857. Martin, Jos. Lloyd, M.D.....Mt. Vernon Place, Baltimore.
1844. McManus, F. R., M.D.....27 Sharpe St., Baltimore.
1848. Middleton, J. D., M.D.....102 W. Fayette St., Baltimore.
1867. Price, Elias C., M.D.....Baltimore.

1844. Schmidt, J., M.D.....96 Eutaw St., Baltimore.
1867. Shearer, Thomas, M.D... .....Baltimore.

MASSACHUSETTS.

1851. Abbott, Jehiel, M.D.....Westfield.
1860. Ahlborn, Henry, M.D.....76 Charles St., Boston.
1868. Alvord, Samuel, M.D.....Chicopee Falls.
1853. Angell, Henry C., M.D .....16 Beacon Street, Boston.
1867. Bailey, J. B., M.D..... ...Charlestown.
1868. Baird, Wm. P., M.D.....Boston.
1848. Barrows, George, M.D.....Taunton.
1859. Bellows, Albert J., M.D.....90 Springfield St., Boston.
1859. Brooks, Charles A., M.D.. ....Clinton.
1860. Brown, Josiah, M.D.....Lynn.
1859. Burpee, John A., M.D..... .....Malden.
1868. Butman, Geo. F., M.D..... 3 Dover St., Boston.
1854. Cate, Shadrach M., M.D.....Salem.
1859. Chamberlain, William B., M.D..... Worcester.
1847. Chase, Hiram L., M.D..... .....Cambridge.
1844. Clark, Luther, M.D.....37 Pinckney St., Boston.
1854. Clarke, Henry B., M.D. .....New Bedford.
1859. Clarke, John L., M.D..... .....Fall River.
1851. Collins, H. A., M.D..... .Springfield.
1859. Cullis, Charles, M.D.....18 Ashburton Place, Boston.
1867. Cushing, Alvin M., M.D... ....Lynn.
1859. De Gersdorff, B., M.D..... 58 Pinckney St., Boston.
1859. Dennett, George Wm., M.D.... .....South Framingham.
1859. Farnsworth, Charles H., M.D.....E. Cambridge.
1844. Fuller, Milton, M.D.....35 Essex St., Boston.
1859. Gale, Stephen M., M.D .....Newburyport.
1851. Gambell, W. P., M.D..... ...2 Rutland St., Boston.
1847. Geist, C. F..... .....2 Franklin Square, Boston.
1844 Gregg, Samuel, M.D.....35 Howard St., Boston.
1867. Harding, Evan B., M.D.....Northampton.
1859. Harding, Wm. F., M.D..... .....Greenfield.
1859. Harris, John T., M.D..... .....Roxbury.
1867. Hedenberg, James, M.D.....Medford.
1867. Hemenway, Horace P., M.D.....E. Somerville.
1846. Holt, Daniel, M.D.....Lowell.

1868. Hunt, David, jr., M.D .....Worcester.
1859. Johnson, Daniel A., M.D..... .....Chelsea.
1854. Jones, Elijah U., M.D.....Taunton.
1865. Krebs, Francis H., M.D.....63 Chauncy St., Boston.
1867. Lewis, William H., M.D ....36 Newton St., Boston.
1858. Lougee, Wm. H., M.D.....Lawrence.
1858. Macfarland, Lafayette, M D..1492 Washington St., Boston.
1859. Matthes, G. Felix, M.D.....New Bedford.
1858. Morrill, Ezekiel, M.D.....Salem.
1867. Morrill, Henry B., M.D.....58 Beach St., Boston.
1867. Morse, Nathan R., M.D..... .....Salem.
1859. Neilson, James C., M.D.....Charlestown.
1859. Nichols, Lemuel B., M.D.....102 Main St., Worcester.
1867. Osborne, James H., M.D... .....Newton Corner.
1868. Packard, Liberty D., M.D.....So. Boston.
1853. Paine, Joseph P., M.D.....659 Shawmut Av., Boston.
1856. Palmer, Frederick N., M.D..... ..Newton Corner.
1860. Payne, James H., M.D.....1262 Washington St., Boston.
1851. Pearson, William, M.D.....S. Hadley Falls.
1868. Pease, Giles M., M.D..... .....Boston.
1867. Pike, Joseph G. W., M.D.....103 Camden St., Boston.
1848. Russell, George, M.D.....14 Lynde St., Boston.
1859. Sanders, Orren S., M.D.....11 Bowdoin St., Boston.
1847. Sawyer, B. E., M.D.....Haverhill.
1867. Scales, Edward P., M.D.....Newton Corner.
1859. Scales, Thomas S., M.D..... .....Woburn.
1867. Shattuck, Henry P., M.D.....645 Washington St., Boston.
1859. Sherman, John H., M.D..... ....Middleborough.
1854. Sisson, Edward R., M.D..... ...New Bedford.
1867. Sisson, William H H., M.D.....New Bedford.
1859. Spencer, Charles L., M.D.....New Bedford.
1868. Squier, A. F., M.D..... 664 Washington St., Boston.
1844. Swazey, George W., M.D..... ..... Springfield.
1853. Talbot, I. Tisdale, M.D.....31 Mt. Vernon St., Boston.
1847. Thayer, David, M.D.....58 Beach St., Boston.
1858. Turner, John, M.D.....725 Tremont St., Boston.
1854. Walker, Charles H., M.D.....Chelsea.
1844. Weld, C. M., M.D..... .....Jamaica Plain.
1859. Wesselhoeft, Conrad, M.D....57 Chauncy Street, Boston.
1859. Wesselhoeft, Wm. P., M.D.....42 Chauncy St., Boston.

1854. Wilder, Daniel, M.D..... ....New Bedford.
1859. Woodbury, John Harvey, M.D....58 Temple St., Boston.
1868. Woods, J. U., M.D..... .....Holyoke.
1868. Woodvine, D. G., M.D.....733 Tremont St., Boston.

MINNESOTA.

1860. Alley, James T., M.D... .....St. Paul.
1857. Hatch, Philo L., M.D. .....Minneapolis.

MISSISSIPPI.

1868. Davis, F. A. W., M.D.....Natchez.

MICHIGAN.

1868. Calvert, William J., M.D..... ... .Ann Arbor.
1867. Craig, J. D., M.D.....Niles.
1867. Drake, E. H., M.D..... ....Detroit.
1857. Harris, Charles Taylor, M.D.....Ann Arbor.
1846. Hempel, Charles J., M.D..... . .....Grand Rapids.
1866. Lodge, Edwin A., M.D..... .51 Wayne St., Detroit.
1854. Pomeroy, Thomas F., M.D.....Congress St., Detroit.
1860. Reed, Jacob, jr., M.D.....Grand Rapids.
1867. Rice, Nathaniel B., M.D.....East Saginaw.
1853. Walker, A., M.D.....Pontiac.
1857. Woodruff, Francis, M.D.....Ann Arbor.

MISSOURI.

1868. Bristol, Bennett J., M.D .....Webster Groves.
1868. Chase, Henry S., M.D... ....St. Louis.
1866. Comstock, T. G., M.D..14th St. and Wash. Av., St. Louis.
1867. Foster, Wm. D., M.D.....Hannibal.
1867. Franklin, E. C., M.D.....St. Louis.
1865. Frost, James H. P., M.D..... .....St. Louis.
1868. Gunderlach, Charles H., M.D.....St. Louis.
1866. Hartmann, J., M.D.....413 N. Eleventh St., St. Louis.
1853. Helmuth, Wm. T., M.D..... 1418 Wash. Ave., St. Louis.
1868. Luyties, D. R., M.D..... ....St. Louis.
1868. Nibelung, Chas. H., M.D... .....St. Louis.
1868. Parsons, Scott B., M.D.....St. Louis.
1868. Phelan, R. A., M.D..... St. Louis.
1867. Skeels, A. P., M.D..... ....St. Louis.

1868. Temple, John T., M.D.....St. Louis.
1868. Tirrell, N. D., M.D.....St. Louis.
1868. Vastine, Chas., M.D.....St. Louis.
1868. Vastine, Thos. J., M.D.....St. Louis.

NEBRASKA.

1860. Wood, O. S., M.D.....Omaha.
1853. Wright, A. S., M.D.....Omaha.

NEVADA.

1859. Wild, Edward A., M.D.....Austin.

NEW HAMPSHIRE.

1868. Gallinger, Jacob H., M.D.....Concord.
1847. Hinds, W. H. H., M.D.....Milford.
1846. Morrill, Alpheus, M.D.....Concord.
1866. Morrill, Shadrach C., M.D.....Concord.
1847. Peterson, James, M.D.....Weare.
1867. Whittle, James Peterson, M.D.....Weare.
1847. Whittle, Joshua F., M.D.....Nashua.

NEW JERSEY.

1846. Annin, J. D., M.D.....Newark.
1867. Bailey, George W., M.D.....Elizabeth.
1845. Boardman, J. C., M.D.....Trenton.
1867. Bowen, Eleazer, M.D.....Jersey City.
1867. Bowen, Horace, M.D.....Jersey City.
1860. Clay, G. B. L., M.D.....Moorestown.
1867. Fairbanks, John N., M.D.....Hightstown.
1867. Fish, Chas. F., M.D.....Newark.
1849. Gardiner, Daniel R., M.D.....Woodbury.
1866. Homer, H., M.D.....Plainfield.
1867. Hunt, Henry F., M.D.....Camden.
1868. Jones, S. A., M.D.....Englewood.
1867. Kirkpatrick, Alexander, M.D.....Burlington.
1867. Macomber, Addison P., M.D.....Hackensack.
1867. McNeil, Daniel, M.D.....Hudson City.
1867. Mandeville, F. B., M.D.....Newark.
1860. Moore, Joseph, M.D.....Bridgeton.
1867. Nichols, Frank, M.D.....Hoboken.
1844. Paine, John A., M.D.....Newark.

1846. Rhees, Morgan J., M.D..... .....Mount Holly.
1868. Tibbles, Geo. N., M.D... ..... .Hudson City.
1867. Tompkins, Silas B., M.D.....Newark.
1844. Ward, Isaac M., M.D... .....Newark.
1844. Ward, Walter, M.D..... .....Mount Holly.
1867. Webb, E. Cook, M.D.....Orange.
1853. Wilkinson, Ross M., M.D.....97 E. State St., Trenton.
1865. Wilson, Pusey, M.D..... Moorestown.
1858. Youlin, John J., M.D.....130 Grove Street, Jersey City.

NEW YORK.

1866. Allen, Timothy F., M.D....105 Fourth Avenue, New York.
1867. Andrews, Joel R., M.D..52 W. Twenty-ninth St.,New York.
1867. Avery, Henry N., M.D.....Poughkeepsie.
1857. Baldwin, Jared G., M.D. 22 E. Twenty-fourth St., N. York.
1844. Ball, Alonzo S., M.D.....43 W. Eleventh St., New York.
1866. Baner, Wm. J., M.D..Fourth Av. and Nineteenth St., N. Y.
1844. Barlow, Samuel B., M.D...55 E. Twenty-first St., N. York.
1867. Bartlett, Edward G., M.D... 80 W. Eleventh St., N. York.
1847. Baxter, William, M.D..... ..... Wappinger's Falls.
1846. Bayard, Edward, M.D.....6 W. Fourteenth St., New York.
1867. Bayliss, B. L. B., M.D..... .....Astoria.
1859. Beakley, Henry, M.D.....Peekskill.
1848. Beakley, Jacob, M.D...Grammercy Park House, New York.
1846. Belcher, George E., M.D..43 E. Twenty-first St., New York.
1867. Benedict, Harris S., M.D..... .....Corning.
1846. Bennet, Hilem, M.D... .... Rochester.
1865. Benson, P. Oscar C., M.D..... .....Skaneateles.
1858. Berghaus, Julius M., M.D....49 West 24th St., New York.
1854. Bigelow, Franklin, M.D.....102 S. Salina St., Syracuse.
1854. Bigelow, J. G., M.D..... ....Syracuse.
1866. Billings, George H., M.D.....7 Hanson Place, Brooklyn.
1854. Bishop, D. F., M.D.....Lockport.
1853. Bissell, Arthur F., M.D.....157 Maiden Lane, New York.
1867. Blakelock, Ralph, M.D..410 W. Twenty-fourth St., New York.
1854. Blanchard, Henry C., M.D... . ...Buffalo.
1844. Bowers, Benjamin F., M.D...23 E. Twentieth St., New York.
1866. Boyce, C. William, M.D..... .....Auburn.
1860. Bradford, F. Standish, M.D....108 Fourth Av., New York.
1867. Brey, Julius C., M.D..... .. ..New York.

1867. Brink, William, M.D....55 E. Twenty-first St., New York.
1867. Brown, Edward V., M.D.....Tarrytown.
1867. Brown, Titus L., M.D.....Binghamton.
1855. Bryant, Joel, M.D.....31 Smith St., Brooklyn.
1867. Bryant, Melville, M.D.....31 Smith St., Brooklyn.
1856. Bull, A. T., M.D.....Buffalo.
1868. Burchard, J. Gregg, M.D.. ..... .Peekskill.
1867. Burdick, Stephen P., M.D.....303 W. 34th St., New York.
1848. Burke, A. C., M.D.....142 Union St., Brooklyn.
1867. Burnett, Benajah J., jr., M.D..... .....Mount Vernon.
1867. Campbell, C. E., M.D. .....19 Second Ave., New York.
1844. Cator, H. Hull, M.D..... .....Kingston.
1867. Cetlinski, Beloit, M.D .....101 E. Twelfth St., New York.
1845. Clary, Lyman, M.D..... .....Syracuse.
1852. Clements, Zina, M.D .....Saratoga.
1867. Comstock, Albert L., M.D.....Mount Kisco.
1848. Cook, Abijah P., M.D..... Hudson.
1867. Cook, E. G., M.D..... ....Buffalo.
1867. Cook, Elliot L., M.D..... ..... .Buffalo.
1850. Cook, Simeon A., M.D.....Troy.
1855. Dake, C. A., M.D... ....Albion.
1847. Dake, C. M., M.D..... .... .Rochester.
1860. Dake, Jabez W., M.D.....Albion.
1868. Dayfoot, Herbert M., M.D..... .....Mt. Morris.
1848. Donovon, Thomas W., M.D.....Quarantine, Staten Island.
1867. Dowling, John W., M.D...58 W. Twenty-fifth St., New York.
1860. Dunham, Carroll, M.D....68 E. Twelfth Street, New York.
1867. Ermentraut, John P., M.D..194 Seventh Street, New York.
1857. Ellis, John, M.D....263 W. Fifty-fourth Street, New York.
1867. Evans, Jos. T., M.D....27 E. Thirty-first St., New York.
1867. Everitt, Daniel L., M.D.....29 Madison St., Brooklyn.
1867. Fanning, Thomas C., M.D.....Tarrytown.
1867 Fellows, H. Barton, M.D.....Aurora.
1868. Finch, Edwin W., M.D .....New Rochelle.
1855. Fincke, B., M.D ....92 Livingston St., Brooklyn.
1867. Fiske, W. M. L., M.D.... .....Rochester.
1867. Flagg, Levi W., M.D.....Yonkers
1858. Freeman, W., M.D...43 W. Twenty-fourth St., New York.
1858. Freligh, Martin, M.D.....128 Ninth Street, New York.
1858. Füllgraff, Otto, M.D.....41 E. Fifteenth St., New York.

1865. Garside, W. B., M.D...Greene Av. and Hall St., Brooklyn.
1867. Goodwin, Thomas S., M.D..Port Richmond, Staten Island.
1844. Gray, John F., M.D.....38 E. Twentieth St., New York.
1855. Gregg, Rollin R., M.D.,.....237 Washington St., Buffalo.
1848. Guernsey, Egbert, M.D..18 W. Twenty-third St., New York.
1847. Guy, Samuel S., M.D.....New York.
1859. Hall, Geo. A., M.D.....Westfield.
1846. Hallock, Lewis, M.D.....92 Madison Ave., New York.
1847. Hamilton, O. D., M.D.....Mount Morris.
1868. Hasbrouck, Stephen, M.D.....New York.
1867. Hawks, John, M.D..... .....20 Jefferson St., Brooklyn.
1858. Hawley, L. B., M.D ....Waverley.
1867. Heurtley, Walter R., M.D..... .....Newburgh.
1867. Hitchcock, H. M., M.D..22 E. Twenty-fourth St., New York.
1867. Hocking, Wm. F., M.D.....Washington Heights.
1858. Hofman, Ernst F., M.D.....40 E. Thirtieth St., New York.
1867. Holtby, Jabez B., M.D...E. Twenty-second St., New York.
1867. Hornby, John, M.D.....Poughkeepsie.
1866. Horwitz, William, M.D..... .....New York.
1858. Hotchkiss, J. T., M.D.....Monroe.
1859. Houghton, H. A., M.D.....Keeseville.
1867. Houghton, Henry C., M.D.....P. O. Box 4700, New York.
1846. Hull, A. Cooke, M.D.....105 Joralemon St., Brooklyn.
1867. Hund, H. B., M.D.....23 Hester St., New York.
1867. Hunt, F. W., M.D.....New York.
1867. Ingalls, F. W., M.D.....Kingston.
1867. Jayne, DeWitt C., M.D.....Florida.
1867. Jones, Henry C., M.D.....Mount Vernon.
1853. Joslin, Benj. F., M.D..52 W. Twenty-ninth St., New York.
1867. Keep, J. Lester, M.D. Cor. Gates & Vandb'lt Avs., Brooklyn.
1848. Keep, Lester, M.D..Cor. Gates & Vand'b'lt Avs., Brooklyn.
1858. Kellogg, Edwin M., M.D..21 E. Twentieth St., New York.
1853. Kenyon, L. M., M.D.....86 W. Mohawk St., Buffalo.
1844. Kimball, David S., M.D..... ...Sackett's Harbor.
1867. Kuhn, Carl W., M.D.....59 Bond St., New York.
1867. Liebold, C. Theo., M.D..57 E. Twenty-first St., New York.
1867. Lilienthal, S., M.D....230 W. Twenty-fifth St., New York.
1846. Lovejoy, Ezekiel, M.D.....Owego.
1867. Lowry, Charles, M.D.....Greenwich.
1844. Mairs, James, M.D...43 W. Twenty-fourth St., New York.

1848. Marcy, Erastus E., M.D.....26 E. Twenty-second St., N. Y.
1866. McMurray, Robert, M.D...192 Second Avenue, New York.
1867. Millard, Henry B., M.D....7 E. Twenty-seventh St., N. Y.
1867. Miller, R. E., M.D..... Oxford.
1858. Minton, Henry, M.D.....138 Remsen St., Brooklyn.
1868. Mitchell, Geo. B. I., M.D.....New York.
1866. Mitchell, John J., M.D....955 Second Avenue, New York.
1867. Mitchell, J. W., M.D...19 W. Twenty-first St., New York.
1867. Moffat, Reuben C., M.D.....Brooklyn.
1867. Montanye, William D. S., M.D .....Rondout.
1855. Morgan, A. R., M.D..... ..Syracuse.
1858. Morrill, Henry E., M.D.....88 Orange St., Brooklyn.
1848. Munger, Erastus A., M.D..... ....Waterville.
1856. Ormes, Cornelius, M.D.....Jamestown.
1844. Paine, Henry D., M.D.....229 Fifth Ave., New York.
1850. Paine, Horace M., M.D.....104 State St., Albany.
1848. Palmer, Miles W., M.D..235 E. Eighteenth St., New York.
1867. Pearsall, S. I., M.D..... .....Saratoga Springs.
1858. Perrine, W. L. R., M.D..... 83 Montague St., Brooklyn.
1867 Pratt, William M., M.D.....218 E. Broadway, New York.
1854. Randel, William H., M.D..... ..... Albany.
1848. Raymond, Jonas C., M.D.....252 Genesee St., Utica.
1847. Richardson, E. T., M.D.....87 Montague St., Brooklyn.
1844. Robinson, Horatio, M.D.....Auburn.
1858. Rosman, John G., M.D.....60 Pierrepont St,, Brooklyn.
1867. Seeley, N. R., M.D.....Elmira.
1867. Shaffer, Levi, M.D... .....Kingston.
1859. Shattuck, Alvin, M.D.....41 S. Division St., Buffalo.
1853. Skiles, F. W., M.D.....86 Clinton St., Brooklyn.
1867. Sloan, Henry N., M.D.....Binghamton.
1866. Smith, Daniel D., M.D..... .....Spring Valley.
1860. Smith, Henry M., M.D.....105 Fourth Avenue, N. Y.
1860. Smith, Thomas Franklin, M.D..128th St., near 4th Av., N. Y.
1867. Sommer, Gustave Justus Moritz, M.D.....East New York.
1868. Southwick, T. E., M.D..... .Ogdensburg.
1850. Springsteed, David, M.D..... Albany.
1865. Sumner, Charles, M.D.....Rochester.
1867. Swan, Samuel, M.D....13 W. Thirty-eighth St., New York.
1867. Thompson, J. H., M.D.....46 Union Square, New York.
1867. Thompson, Virgil, M.D.....41 Barrow St., New York.

1856. Ward, John A., M.D.....20 East 21st St., New York.
1857. Ward, Joseph B., M.D...Cor. Bedf'd Av. & B'way, Brooklyn.
1848. Warner, Lewis T., M.D...39 E. Nineteenth St., New York.
1854. Watson, William H., M.D.....270 Genesee St., Utica.
1848. Wells, Lucien B., M.D.....225 Genesee St., Utica.
1844. Wells, P. P., M.D.....84 Clinton St., Brooklyn.
1858. West, Edwin, M.D....42 W. Washington Place, New York.
1866. Wetmore, John M., M.D. 43 E. Twenty-first St., New York.
1867. White, J. Ralsey, M.D.....1915 Third Av., New York.
1860. White, Theodore C., M.D..... .....Rochester.
1867. White, W. Hanford, M.D..26 E. Twenty-second St., N. Y.
1855. Wilder, Louis de V., M.D.....82 W. 29th St., New York.
1858. Wright, Albert, M.D...Cor. Bedf'd Av. & B'way, Brooklyn.
1867. Wright, Wm., M.D..... ..34 Fifth Street, Brooklyn, E. D.

NORTH CAROLINA.

1860. Freeman, Wm. E., M.D.... ....Wilmington.

OHIO.

1853. Barnes, George W., M.D..... ....Cleveland.
1868. Baxter, H. H., M.D.....Columbus.
1865. Beckwith, D. H., M.D.....Cleveland.
1857. Beckwith, Seth R., M.D.. ... .Cleveland.
1868. Biggar, Hamilton F., M.D.....Cleveland.
1850. Bigler, G. W., M.D..... .....Cincinnati.
1865. Bradford, T. C., M.D.....170 W. Fourth St., Cincinnati.
1865. Bronson, Charles C., M.D..... .....Cincinnati.
1865. Caldwell, S. N., M.D..... ....Piqua.
1865. Coffeen, J. Q. A., M.D..... .....Springdale.
1865. Cropper, Charles, M.D.....Cincinnati.
1852. Dake, Jabez P., M.D..... .....Salem.
1865. Ehrman, A. H., M.D....46 W. Seventh Street, Cincinnati.
1846. Ehrman, Benjamin, M.D....46 W. Seventh St., Cincinnati.
1849. Ehrman, C., M.D..... ... .Cincinnati.
1846. Ehrman, F., M.D.....87 W. Seventh Street, Cincinnati.
1865. Fuller, James M., M.D.....253 Richmond St., Cincinnati.
1866. Graham, Wm. G., M.D.....Canton.
1865. Harpell, J., M.D.....426 John St., Cincinnati.
1865. Hartshorn, D. W., M.D..... .....Cincinnati.
1865. Hunt, James G., M.D.....100 W. Ninth St., Cincinnati.

1868. Hunter, A. O., M.D. .....Mansfield.
1853. Johnson, J. M., M.D.....Cleveland.
1866. Keyes, A. E., M.D.....Ravenna.
1865. Lynde, Robert R., M.D.....Cincinnati.
1865. Owens, William, M.D .. ..Cincinnati.
1853. Parks, Jesse M., M.D.....Hamilton.
1844. Pulte, Joseph H., M.D... ..... .Cincinnati.
1865. Rush, R. B., M.D.....120 Main St., Salem.
1860. Sanders, John C., M.D.....Cleveland.
1868. Schneider, N., M.D.....Cleveland.
1846. Shepard, A., M.D..... Glendale.
1860. Thomas, E. B., M.D.....119 W. Ninth St., Cincinnati.
1853. Turrill, M. Y., M.D..... .....Cleveland.
1866. Verdi, Ciro S., M.D.....17 Monument Sq., Cleveland.
1865. Webster, W., M.D .....127 Main St., Dayton.
1867. Wheeler, Alexander W., M.D.....Cleveland.
1865. Wilson, T. P., M.D.....Cleveland.

PENNSYLVANIA.

1858. Ashton, A. H., M.D.....730 S. Tenth Street, Philadelphia.
1866. Barnaby, J. E., M.D.....Allegheny City.
1846. Belt, R. G., M.D.....Philadelphia.
1846. Berens, Bernard, M.D.....909 Arch Street, Philadelphia.
1846. Berens, Joseph, M.D....513 North Sixth St., Philadelphia.
1865. Blakely, William J., M.D.....Benzinger, Elk Co.
1865. Boericke, F. E., M.D.....635 Arch Street, Philadelphia.
1866. Borland, W. C., M.D.....Pittsburg.
1860. Brooks, Silas S., M.D ...140 N. Twelfth St., Philadelphia.
1867. Bunting, Thomas C., M.D.....Mauch Chunk.
1854. Burgher, J. C., M.D..... .....332 Penn St., Pittsburg.
1865. Childs, W. R., M.D.....208 Penn St., Pittsburg.
1866. Cook, William H., M.D.....Carlisle.
1866. Cooper, Frank B., M.D.....Allegheny City.
1866. Cooper, J. F., M.D..... .....Allegheny City.
1856. Côtè, Marcellin, M.D..... ..284 Penn St., Pittsburg.
1865. Cowley, David, M.D.....298 Penn St., Pittsburg.
1866. Dake, B. F., M.D.....300 Penn St., Pittsburg.
1844. Detwiller, H., M.D..... ....Easton.
1858. Detwiller, J. J., M.D.....Easton.
1866. Earheart, J. R., M.D..125 N. Seventeenth St., Philadelphia.

1866. Faulkner, R., M.D.....Erie.
1866. Foster, G. S., M.D..... .....Allegheny City.
1866. Friese, M., M.D ....Harrisburg.
1846. Gardiner, Richard, M.D...526 Spruce Street, Philadelphia.
1846. Guernsey, Henry N., M.D.....1423 Chestnut St., Phila.
1852. Guernsey, Wm. F., M.D.....4430 Frankford Ave., Phila.
1867. Gumpert, B. B., M.D. Cor. Frank' and Parrish Sts., Phila.
1846. Helmuth, Wm. S., M.D....312 S. Tenth St., Philadelphia.
1844. Hering, Constantine, M.D.....112 N. Twelfth St., Phila.
1856. Herron, James A., M.D.....12 Smithfield St., Pittsburg.
1865. Hewitt, Thomas, M.D.....Allegheny City.
1854. Hofman, H. H., M.D.....216 Penn St., Pittsburg.
1854. Houard, John G., M.D.....402 S. Broad St., Philadelphia.
1859. James, Bushrod W., M.D....609 N. 18th St., Philadelphia.
1846. James, D., M.D.....1013 Green Street, Philadelphia.
1846. James, Isaac, M.D... .....Bustleton.
1866. James, J. E., M.D.....1013 Greene Street, Philadelphia.
1844. Jeanes, Jacob, M.D.....519 Vine Street, Philadelphia.
1858. Jones, Joseph E., M.D..... .....West Chester.
1860. Johnson, Isaac D., M.D.....Kennet Square.
1848. Koch, A. W., M.D.....118 N. Twelfth St., Philadelphia.
1868. Koch, Richard, M.D.....Philadelphia.
1866. Lee, C. H., M.D.....Tarentum.
1860. Lee, J. K., M.D....S. W. cor. 38th & Chestnut Sts., Phila.
1845. Lippe, Adolph, M.D... ...1204 Walnut St., Philadelphia.
1866. Logee, H. M., M.D..... .....Linesville.
1868. Macfarlan, Malcolm, M.D.....Philadelphia.
1860. Malin, John, M.D.....4847 Main St., Germantown.
1866. Marsden, J. H., M.D.....York Springs.
1868. Martin, H. N., M.D.....630 Spruce St., Philadelphia.
1868. Marvin, C. H., M.D.....Philadelphia.
1860. McClatchey, Robert J., M.D.....916 N. Tenth St., Phila.
1867. McClelland, J. H., M.D... ..... .Pittsburg.
1860. McLeod, G. J., M.D.....3905 Locust Street, Philadelphia.
1860. Moore, Thomas, M.D .....Germantown.
1867. Morgan, John C., M.D..... Philadelphia.
1844. Neidhard, Charles, M.D.....1020 Arch St., Philadelphia.
1866. Preston, Coates, M.D..... .....Chester.
1865. Rankin, J. S., M.D .....105 Fifth St., Pittsburg.
1860. Reading, Edward, M.D.....Hatborough.

1848. Reading, J. R., M.D.. ....Somerton.
1857. Reed, William A., M.D.....123 N. Eleventh St., Phila.
1866. Richards, J. C., M.D.....Lock Haven.
1866. Rousseau, L. M., M.D.....294 Penn St., Pittsburg.
1866. Smedley, Robert C., M.D.....West Chester.
1867. Smith, William H., M.D.....815 Spruce St., Philadelphia.
1860. Starkey, George R., M.D.....1713 Arch St., Philadelphia.
1846. Stevens, C. A., M.D.....Scranton.
1852. Stevenson, T. Collins, M.D.....Carlisle.
1866. Stewart, Jacob, M.D.....Sharpsburg.
1866. Townsend, E. W., M.D.....Greensburg.
1860. Trites, David T., M.D.....Manayunk.
1867. Ure, Walter, M.D..... ....Allegheny City.
1848. Vinal, L. G., M.D.....958 N. Tenth St., Philadelphia.
1865. Wallace, M. W., M.D.....Allegheny City.
1866. Werder, Max, M.D..... Johnstown.
1867. Willard, L. H., M.D.....Allegheny City.
1844. Williamson, Walter, M.D..Cor. 11th & Filbert Sts., Phila.
1857. Williamson, Walter M., M.D..Cor. 11th & Filbert Sts., Phil.
1867. Wood, Henry C., M.D.... .....West Chester.
1854. Wood, J. B., M.D.....West Chester.
1867. Zantzinger, Alfred, M.D.....300 South Tenth St., Phila.

RHODE ISLAND.

1846. Barrows, Ira, M.D....Cor. Wash. & Mathewson Sts., Prov.
1868. Budlong, John C., M.D.....Centredale.
1846. Clarke, Peleg, M.D.....21 Sutton St., Providence.
1847. DeWolfe, John J., M.D. .....Providence.
1844. Manchester, Charles F., M.D.....29 Mills St., Pawtucket.
1867. Sawin, Isaac W., M.D..... :.....Centredale.
1856. Stevens, Grenville S., M.D.....Providence.

TENNESSEE.

1866. Sheffield, H., M.D.....139 Broad Street, Nashville.

TEXAS.

1868. Angell, Edwin P., M.D.....Galveston.

VERMONT.

1867. Currier, C. B., M.D.....Middlebury.

1859. Sparhawk, George E. E., M.D..... .....Gaysville.
1865. Woodhouse, Charles, M.D..... ....Rutland.

WISCONSIN.

1847. Douglas, J. S., M.D.....Milwaukee.
1855. Gray, A. W., M.D.....Milwaukee.
1857. Ober, L. E., M.D.....La Crosse.

NOVA SCOTIA.

1867. Wesselhoeft, Walter, M.D.....Halifax.

MISCELLANEOUS.

1859. Munde, Charles, M.D.....Würzburg, Germany.
1858. Wackerbarth, T. von, M.D.....Germany.

CORRESPONDING MEMBER.

1868. Moore, John, M.D.....Liverpool, Eng.

XV.

DECEASED MEMBERS,

JUNE 1, 1868.

Members are requested to send to the General Secretary information which will enable him to fill the blank spaces; also the age, and date of decease of any members who have died during the past year.

Adm'd.	NAMES.	Former Residence.	Died.	Age.
1846.	Adams, Henry, M.D.	Cohoes, N.Y.		
1846.	Anderson, M., M.D.	Philadelphia.	April 18, 1855.	57
1846.	Andrews, J. R., M.D.	Camden, N. J.	Feb. 19, 1864.	46
1846.	Atwood, M., M.D.	Francist'n,N.H.	April 28, 1850.	49
1847.	Baker, George, M.D.	Chelsea, Mass.	Dec. 25, 1852.	56
1858.	Baker, Joseph C., M.D.	Middleboro',Ms.	Feb. 23, 1865.	50
1848.	Beard, D. H., M.D.	Troy, N.Y.		
1847.	Bell, H. W., M.D.	Peekskill. N. Y.	July, 1863.	63
1846.	Belt, R. G., M.D.	Woonsocket,R.I.		
1865.	Birnstill, Joseph, M.D.	Newton Cor. Ms.	Feb. 16, 1867.	56
1865.	Blackburn, G. S., M.D.	Cincinnati,Ohio.	Aug. 21, 1866.	26
1845.	Bloss, Richard, M.D.	Troy, N.Y.	Sept. 3, 1863.	65
1846.	Bolles, Rich'd M., M.D.	New York.	Aug. 9, 1865.	68
1848.	Brown, Joseph R.,M.D.	Galveston,Texas.		
1844.	Bryan, Rich'd S., M.D.	Troy, N.Y.	March 5, 1860.	64
1854.	Bryant, Chas. G., M.D.	San Fran., Cal.		
1844.	Channing, Wm., M.D.	New York.	1854.	
1859.	Church, Wm. I., M.D.	Pittsburg, Pa.	Sept. 29, 1862.	35
1847.	Colby, Isaac, M.D.	Concord, N.H.	June 29, 1866.	73
1844.	Cook, George W., M.D.	New York.	Oct. 1, 1849.	
1847.	Cox, George, M.D.	Williamsb'g,N.Y.	Nov. 11, 1853.	58

1852.	Coxe, J. R., jr., M.D.	Philadelphia, Pa.	May 11,	1863.	65
1852.	Coxe, L. Lewis, M.D.	Philadelphia, Pa.	Nov. 28,	1866.	29
1846.	Crittenden, Dr. J.,	Morristown, N.J.			
1852.	Crocker, Isaac S., M.D.	Providence, R.I.	Oct. 26,	1866.	38
1846.	Crosby, Dr. Eliakim,	Green Bay, Wis.	Sept. 2,	1854.	70
1854.	Darling, Chas. B., M.D.	Lyndon, Vt.	June 10,	1860.	41
1852.	Duffield, Henry, M.D.	Oxford, Pa.	Dec. 5,	1865.	65
1845.	Esrey, W. P., M.D.	Philadelphia, Pa.	Sept. 28,	1854.	39
1844.	Flagg, Josiah F., M.D.	Boston, Mass.	Dec. 20,	1853.	64
1866.	Foster, George S., M.D.	Allegheny City, Pa.			
1846.	Freeman, Alfred, M.D.	New York.	March 8,	1861.	67
1844.	Freytag, Eberhard, M.D.	Bethlehem, Pa.	March 14,	1846.	82
1846.	Gardiner, Wm. A., M.D.	Philadelphia, Pa.	April 29,	1863.	39
1846.	Gilbert, James B., M.D.	Savannah, Ga.			
1857.	Giles, Albert, M.D.	Racine, Wis.	June 7,	1862.	53
1844.	Gosewisch, J. C., M.D.	Wilmington, Del.	May 11,	1854.	46
1847.	Graves, S. W., M.D.	Chicago, Ill.	July 6,	1854.	35
1844.	Hale, Eben, M.D.	Boston, Mass.	Aug. 2,	1847.	38
1846.	Harris, Dr. Zina H.	New York.	April 30,	1859.	
1865.	Harvey, J. R., M.D.	Allegheny City, Pa.	July 7,	1866.	34
1847.	Herrick, Israel, M.D.	Lyndeboro', N.H.	Feb. 18,	1866.	71
1850.	Hoppin, Wash., M.D.	Providence, R.I.	April 1,	1867.	40
1856.	Horton, Freeman, M.D.	Weare, N.H.	March 3,	1861.	45
1844.	Hull, A. Gerald, M.D.	New York.	April 25,	1859.	49
1844.	Humphreys, E., M.D.	Utica, N.Y.	March 14,	1848.	63
1844.	Ingalls, Wm., M.D.	Worcester, Mass.	Sept. 8,	1857.	82
1844.	Janney, Daniel, M.D.	Purcell's Store, Va.	Oct. 13,	1859.	67
1844.	Joslin, Benj. F., M.D.	New York.	Dec. 31,	1861.	65
1846.	Kern, B. F., M.D.	Philadelphia, Pa.			
1858.	Kirk, Isaac E., M.D.	Hudson, N.Y.	Aug. 17,	1859.	27
1846.	Leon, Alexis, M.D.	New York.	Sept. 2,	1866.	49
1848.	Loomis, J. G., M.D	Philadephia.	Oct. 25,	1853.	42
1853.	Macy, Benj. C., M.D.	Dobbs'Ferry, N.Y.	Sept. 16,	1864.	55

1867.	Mathews, M. M., M.D.	Rochester, N.Y.	Nov. 23, 1867.	
1846.	Matthews, C. B., M.D.	Phila., Pa.	May 27, 1851.	50
1856.	McAllester, J. M., M.D.	Phila., Pa.		
1856.	McManus, F. S., M.D.	Baltimore, Md.	Nov. 20, 1857.	25
1844.	Merrill, J., M.D.	Portland, Me.	June 7, 1855.	73
1851.	Metcalf, J. W., M.D.	New York.	April 14, 1856.	39
1847.	Middleton, R. S., M.D.	Philadelphia.		
1852.	Miller, Thomas, M.D.	Steubenville, O.	Nov. 21, 1867.	70
1848.	Moore, John, M.D.	Burlington, Vt.	1867.	
1859.	Nichols, John S., M.D.	Woonsocket, R.I.	Jan. 15, 1862.	36
1850.	Ober, Benjamin, M.D.	San Fran., Cal.,	May 14, 1867.	67
1847.	Osgood, David, M.D.	Boston, Mass.	Feb. 23, 1863.	69
1847.	Parker, H. C., M.D.	M'chester, N.H.	Dec. 8, 1861.	48
1844.	Payne, John, M.D.	Belfast, Me.	Oct. 7, 1857.	56
1847.	Payne, L. V., M.D.	Belfast, Me.	July 8, 1853.	29
1845.	Peak, Dr. Jesse M.	Cooperstown, N.Y.		
1850.	Peck, William, M.D.	Cincinnati, Ohio.	June 3, 1857.	
1858.	Perkins, R. G., M.D.	Charleston, S.C.	Aug., 1861.	
1857.	Pitney, Aaron, M.D.	Chicago, Ill.	April 7, 1865.	
1844.	Quin, James M., M.D.	New York.	March 27, 1868.	
1852.	Randal, John M., M.D.	Chesapeake, Md.	July 13, 1858.	27
1844.	Rea, Albus, M.D.,	Portland, Me.	Oct. 14, 1848.	50
1848.	Reichelm, G., M.D.	Philadelphia.	Nov. 22, 1861.	60
1856.	Roberts, E. W., M.D.,	Harrisburg, Pa.	Nov. 10, 1865.	58
1847.	Roberts, Dr. J.	Vassalboro'. Me.	Mar. 15, 1856.	72
1848.	Roche, M. B., M.D.	NewBedford, Ms.	July 2, 1862.	73
1852.	Rosa, Lemuel K., M.D.	Painesville, O.	Feb. 29, 1853.	27
1845.	Rosa, Storm, M.D.	Painesville, O.	May 3, 1864.	73
1845.	Rosman, R., M.D.	Brooklyn, N.Y.	Dec. 25, 1859.	54
1848.	Royston, T. P., M.D.	Lockport, N.Y.	1852.	
1860.	Samson, C. M., M.D.	Brooklyn, N.Y.	1862.	
1854.	Sanborn, B., M.D.	St. Johnsbury, Vt.	Oct. 4, 1867.	67
1859.	Saunders, C. T., M.D.	Waltham, Mass.	Jan. 4, 1862.	29
1846.	Schuè, John, M.D.	Hartford, Conn.	Sept., 1856.	

1846.	Schwartz, Dr. G.	Philadelphia.	April 28, 1863.	67
1854.	Sheek, J. F., M.D.	Philadelphia.	Jan. 31, 1858.	
1845.	Sherrill, H., M.D.	New York.	Jan. 16, 1866.	82
1860.	Smith, J. W., jr., M.D.	Brooklyn, N. Y.		
1845.	Snow, R. A., M.D.	New York.	Oct. 4, 1849.	
1846.	Stansbury, R.M., M.D.	Sacramento, Cal.	Nov. 5, 1850.	43
1848.	Stebbins, N., M.D.	Medina, N. Y.		
1860.	Stehman, J. G., M.D.	Lancaster, Pa.		
1854.	Stone, Alfred B., M.D.	Medford, Mass.	June 3, 1855.	26
1853.	Stretch, J. B., M.D.	Salem, N. J.	Mar. 7, 1865.	40
1845.	Sullivan, J. L., M.D.	New York.		79
1848.	Swan, Daniel, M.D.	Medford, Mass.	Dec. 5, 1864.	83
1846.	Taft, G. M , M.D.	New Orleans, La.	Aug. 9, 1847.	
1847.	Tarbell, J. A., M.D.	Boston, Mass.	Jan. 21, 1864.	53
1844.	Taylor, John, M.D.	New York.	April 5, 1850.	45
1851.	Vastine, P. E., M. D.	Trenton, N. J.	April, 1857.	
1848.	Walker, Chas., M.D.	N'hampton, Mass.	Jan. 17, 1855.	52
1853.	Warner, N. H., M.D.	Buffalo, N. Y.	June 24, 1860.	52
1844.	Wesselhoeft, W., M.D.	Boston, Mass.	Sept. 1, 1858.	64
1844.	Whitehead, C., M.D.	Philadelphia.	Jan. 29, 1858.	51
1844.	Wild, Charles, M.D.	Brookline, Mass.	May 3, 1864.	69
1844.	Wilsey, F. L., M.D.	New York.	May 11, 1860.	63
1844.	Wilson, A. D., M.D.	New York,	Jan. 20, 1864.	63
1846.	Witherill, E. C., M.D.	Cincinnati, Ohio.	Oct. 30, 1866.	44
1846.	Withey, S. J., M.D.	Philadelphia.		
1848.	Wolcott, W. G., M.D.	Whitehall, N.Y.	Sept. 7, 1866.	50
1854.	Wood, J. G., M.D.	Salem, Mass.	April 29, 1859.	29
1844.	Wright, Clark, M.D.	New York.		59

SECTION II.

REPORT

OF THE

BUREAU OF MATERIA MEDICA, PHARMACY,

AND

PROVINGS:

CONRAD WESSELHOEFT, M.D. - - - - - - - - - Boston, Mass.
WALTER WILLIAMSON, M.D. - - - - - - - - - Philadelphia, Pa.
WILLIAM E. PAYNE, M.D. - - - - - - - - - - Bath, Me.
EDWIN M. HALE, M.D. - - - - - - - - - - - Chicago, Ill.
SAMUEL B. BARLOW, M.D. - - - - - - - - - - New York.

TO THE

TWENTY-FIRST SESSION

OF THE

American Institute of Homœopathy.

VOLUME I. NUMBER 2.

CONTENTS.

V.	Lilium Tigrinum - - - - - - - -	William E. Payne, M.D.
VI.	Iris Versicolor - - - - - - - -	Conrad Wesselhoeft, M.D.
VII.	Ptelea Trifoliata - - - - - - - -	Edwin M. Hale, M.D.
VIII.	Materia Medica, Therapeutics, and Pharmacy -	Walter Williamson, M.D.
IX.	History of the Materia Medica - - - -	Samuel B. Barlow, M.D.

V.

LILIUM TIGRINUM.

BY WILLIAM E. PAYNE, M.D.

THE provings of the *tiger lily* reported to the Institute last year (Transactions, 1868; Section II., pp. 93–98) were made upon the male; but among the experiments now offered are some made upon the female subject. The provings of last year were made with the tincture from the flowers only. In the present provings, the medicine used was obtained by macerating in alcohol, for about two weeks, the stalk, leaves, and flowers, gathered in the month of August.

THIRD PROVING, BY F. G. BARKER.

Prover, aged thirty years, musician and printer; nervo-bilious temperament; height, five feet eight and one-half inches; weight, from 145 to 150 pounds.

Saturday, May 9, 1868, eight, P.M. — Took six drops of the tincture of Lilium tigrinum in two table-spoonfuls water. In about an hour, experienced slightly confused feeling in head, with little pain. Had been reading and writing. Quarter before ten, went to bed, after evacuation of bladder. Confused feeling increased. Slight rushing sounds in both ears. Slept soundly, without dreaming much. About the middle of the night, awoke suddenly. Coated feeling in mouth and throat. Arose and evacuated bladder, — a very unusual thing with the prover. Slept again until quarter before six, when he awoke suddenly and again emptied the bladder. Continued, heavy

feeling in head. Steady, though not severe pain, in lumbar region. Intermittent, sharp pain across lower part of bowels, seemingly near the bladder. Slept again until eight, when the bladder was evacuated for the fourth time in about ten hours, which is very unusual with him during the night.

May 10. — Continued pain in lumbar region, though sensibly growing lighter. No pain in front. Occasional transfer of pain to between shoulders. Sharp, though not severe pain, over left eye, almost continuously through the forenoon. Quarter to twelve, A.M. — Pain in lumbar regions and over left eye nearly all gone. Some pain still manifest between shoulders. Took eight drops in two table-spoonfuls water. No effect, except slight continued pain in forehead, particularly over left eye.

Half past four, P.M. — Took eight drops in two table-spoonfuls water. Pain over left eye, also in lumbar region, increasing in severity. Several evacuations of bladder during the day. Urine remarkably clear and white at every evacuation. During evening, tried to compose music, but could not; for a sleepy feeling, which pervaded the whole frame, compelled the prover to retire at the unusually early hour of nine.

May 11. — Arose late, very much distressed with pain in lumbar region which lasted through the day and did not disappear until evening.

May 12, twenty minutes to six, A.M. — Took eight drops in two table-spoonfuls water. No effect whatever.

May 13, half past six, A.M. — Took twelve drops in two table-spoonfuls water. In the middle of the forenoon, intensely sharp pain in right side, between hip and false ribs, extending forward and upward to umbilicus. Felt something like an attack of colic, so severe as to render a deep, full breath intolerable. Was almost obliged to stop work (setting type). Pain lasted till a little past noon, when it stopped suddenly. Ceased taking the drug, as the symptoms seemed to be too severe to endure while obliged to stand up all day in a printing office.

FOURTH PROVING, BY MISS ——.

Prover, a teacher, unmarried; forty-two years old; rather stout; temperament, nervo-bilious; had not menstruated for two years, but had enjoyed uninterrupted good health.

OBSERVATION I.

Sept. 3, 1867, half past eight, A.M. — Took five drops of the tincture. The same number of drops were taken at the same hour, on the two following days. On the 6th, ten drops, which were repeated daily to the 15th.

Sept. 16, half past eight, A.M. — Took twenty-five drops. Two hours later, pain commenced in the forehead above the eyes, severe for more than an hour, then gradually abating. No other symptoms.

Sept. 20, half past eight, A.M. — Took thirty drops in about two hours. Pain in the sacrum, with a sensation of weight and downward pressure in lower part of abdomen (hypogastrium,) which continued with a good deal of severity till the 26th, worse when standing.

Sept. 26, half past eight, A.M. — Took thirty drops. Had a discharge of bright-red blood from the vagina, (for the first time in two years,) with dull, heavy pain, and great weakness in the small of the back and loins; continued the four following days.

Oct. 1. — Pain in right side of face, apparently in cheek [malar ?] bone, with stoppage of right nostril, and a feeling in the head like that which proceeds from a severe cold.

Oct. 15. — Constant nausea, with sensation as of a lump in the centre of the chest, which could be moved down by empty swallowing; nevertheless, it ascended again after the effort was over. Bearing down in lower part of abdomen continues, — now the twentieth day since it commenced, — with severe pressure in

the rectum, and at the anus, and a constant desire to go to stool; but, with every effort to evacuate the bowels, urine only was discharged. Sensation as if a hard body were pressing backwards and downwards against the rectum and anus. Standing on the feet aggravated and increased the desire to go to stool. These symptoms were somewhat relieved by walking in open air, and riding.

Bowels feel as if swollen (distended?). Trembling sensation in abdomen, with chilliness. Cold feet and hands. Urgent desire to go to stool, — cannot wait. When at stool, severe downward pressure of the bowels, and at the anus, with a feeling as if diarrhœa would ensue, but without fæcal evacuation. [Observed by two provers.] With every effort, only a small quantity of urine would be discharged.

Loss of appetite; aversion to coffee, — nausea when thinking of it, though used as a constant and favorite drink in the morning; frequent passing of urine in small quantities; faint in a warm room, and when standing, with cold perspiration on back of hands and on feet; blurred vision,—cannot see objects distinctly; depression of spirits; constant inclination to weep, with fearfulness, and apprehension of suffering from some terrible internal disease, already seated. [Very marked symptom, observed by two provers.] Weakness and trembling of the bowels, with loss of strength; very sleepy at other times than the usual sleeping hours.

Oct. 20. — The above symptoms gradually increased in severity, with but little variation, up to this date; when the prover, prompted by the apprehension of some severe internal disease, submitted to an examination, *per vaginam*, by her physician. He reported that he found the uterus low down, the fundus tilted forwards, and the os uteri pressing backwards upon the rectum, allowing but a difficult passage of the index finger between the os and the rectum. He further reports that the internal use of Helonias dioica gave relief in the course of twenty-four hours;

and in three days the relief was entire. The prover avers that she never before had any symptoms like the above.

It is to be regretted that a physical examination of the condition of the uterus was not made after the disappearance of the symptoms; and also, that the condition of that organ was not known prior to the beginning of the proving. By this course, more direct important practical knowledge might have been obtained; though, from the reported previous good health of the prover, it is a justifiable inference that the organic condition of the uterus, as found on examination, did not exist prior to the employment of the drug.

Observation II.

Dec. 17, 1867, noon. — Took fifteen drops of the first decimal dilution.

Dec. 18, ten, A.M. — Took fifteen drops, and repeated the same at four, P.M.

Dec. 19, ten, A.M. — Twenty drops, and again at three, P.M. One hour after the last dose, she felt a sharp and quick pain in left side of chest, with fluttering of the heart. Sharp pain at six, P.M., over the left eye, abating after about an hour, but continuing all the evening. It disappeared after sleeping.

Dec. 21, nine, A.M. — Took twenty-five drops. Frequent attacks of palpitation of the heart; dull pain low down in the back, in the sacrum; loss of appetite; aversion to bread and coffee.

Dec. 22, two, P.M. — Took twenty-five drops. Dull pain in the forehead over the eyes; low-spirited; aversion to bread and coffee continues; a dull and constant pain in the back, between the hips, with pressing downwards at the anus. This pain in the back and pressure at the anus continued to the 26th, not much relieved by lying down.

Dec. 26, eleven, A.M. — Took thirty drops; dull pain in fore-

head, over the eyes, commenced at noon, and continued about two hours; pain in the back, and nausea; no appetite; depression of spirits, — disposition to weep.

Dec. 27. — Thirty drops. Pain in sacrum all day; disrelish for food, particularly bread, and repugnance to coffee. On going to bed, a cold feeling in the back, as if cold water were poured upon it.

Dec. 28.—In the morning, when awakening, the left cheek was a bright-red color, and hot to the touch. Took thirty drops at eleven, A.M. At two, P.M., dull pain over the eyes, continuing for about two hours. Dull pain in small of back and sacrum, all the afternoon and evening. No desire for food; special dislike to bread continues; depression of spirits, with continued disposition to weep; pressing in rectum and anus; cold chills in the back, particularly after going to bed at night, with hot flushes towards morning.

Dec. 29, one, P.M. — Thirty drops. Pain in back all the evening, till after midnight, when it abated somewhat.

The above symptoms now became so annoying to the prover, and the fear so great that she would be incapacitated for her duties, that she gave up further experiments, and also the record. She adds that her usual appetite for bread and coffee did not return for nearly three weeks.

Should the above-recorded, well-marked uterine symptoms receive clinical confirmation, — the only way in which the genuineness of the recorded symptoms of drugs can be placed beyond question, — then will the tiger lily prove a valuable addition to the list of drugs which constitutes the weaponry of the physician in combating diseases of females.

There was, with all the provers, a constant apprehension that some serious and incurable disease was present, and clinical observations have confirmed this symptom: for example, with the uterine symptoms, there was constant fear that an incurable

uterine disease was present; and, with the heart symptoms, an incurable heart disease.

SUMMARY.

PROVERS:

B. . . . . Mr. F. G. Barker.
D. . . . . Mr. G., a *Dentist.*
G. . . . . S. P. Graves, M.D.
S. . . . . J. W. Savage, M.D.
T. . . . . Miss ——, a *Teacher.*

GENERAL SYMPTOMS.

1 Low spirits. T.
Depression of spirits; disposition to weep. T.
Depression of spirits; constant inclination to weep; fearfulness and apprehension of some internal disease. T.
Indisposition to labor; dread of business. D.
5 Sleepiness before bedtime; much sleep. B.
Sleepiness at unusual hours. T.
Faintness in a warm room, and on standing. T.
Loss of strength. T.
Chilliness. T.

HEAD.

10 Heavy feeling in the head. B.
Slightly confused feeling in the head, with little pain. B.
Headache: *cured.* D.
Heat and fullness of head and face. S.
Dullness of head: *cured.* D.
15 Dullness of right side of head, increasing to pressure, and inclining head over to left side. G.

EYES.

Pain over the eyes. T.
Dull pain over the eyes. T.

Sharp—not severe—pain over left eye. B.

Sharp pain over left eye. T.

20 Pain in forehead and particularly over left eye. B.

Blurred vision. T.

Ears.

Slight rushing sound in both ears. B.

Nose.

Stoppage of right nostril. T.

Feeling as of severe cold in the head. T.

Face.

25 Heat and fullness of face and head. S.

Pain in right side of face, apparently in cheek [malar ?] bone. T.

Left cheek bright-red, and hot to the touch. T.

Mouth and Throat.

Coated feeling in mouth and fauces. B.

Hawking of mucus in throat, with constant desire to vomit. S.

Stomach.

30 Aversion to a favorite beverage (coffee), and nausea on thinking of it. T.

Anorexia. T.

Loss of appetite: *cured.* D.

Loss of appetite and aversion to bread, continued nearly three weeks after proving. T.

Slight nausea. S.

35 Nausea. T.

Nausea, with great desire and futile efforts to vomit. S.

Constant nausea. T.

Nausea, and inclination to vomit. S.

Constant desire to vomit, and hawking of mucus from the throat. S.

40 Unwonted exemption from sick headache. S.

Eructations from stomach immediately on taking drug. S.

Great distension of stomach [abdomen?] with frequent eructations and escape of flatus. S.

ABDOMEN.

Bubbling sensation in right hypochondrium. S.

Intensely sharp pain in right side, between hip and false ribs, extending forwards to umbilicus. B.

45 Trembling sensation in abdomen. T.

Weakness and trembling of bowels. T.

Bowels very uncomfortable. S.

Bowels feel as if swollen [distended]. T.

Abdomen tender on pressure. S.

50 Slight pain in the bowels, with rumbling, — mostly on right side. S.

Moving of flatus in bowels, and feeling of fullness. S.

Much rumbling in abdomen. S.

Rumbling in lower part of bowels, more on right side. S.

Colicky feeling, rendering full breath impossible. B.

55 Heat and pressure in hypogastrium. S.

Slight pain in abdomen after stool. S.

Intermittent, sharp pain across the lower bowels. B.

Pressure downwards and backwards against the rectum and anus, aggravated by standing, relieved by walking in the open air or riding. T.

Downward pressure in lower bowels, worse when standing. T.

STOOL.

60 Severe pressure on rectum and anus. T.

Urgent desire to go to stool · cannot wait. T.

Tenesmus; efforts to stool resulting in voiding a little urine only. T.

Diarrhœic sensation, no discharge. S.

Diarrhœic feeling, resulting in a little urine only. T.

65 Pressing down at anus; not much relieved by lying down.

Violent emission of flatus. S.

Escape of flatus, with great distention of stomach, and frequent eructations. S.

Stool dark and hard. S.

Heat in rectum and anus after stool. S.

Urine.

70 Micturition scanty and frequent. T.

Copious flow of urine. B.

Urine copious the second day after each dose. G.

Urine high colored. G.

Urine remarkably clear and white. B.

Female Genital Organs.

75 Bearing down in lower abdomen, for twenty days. T.

Bright-red blood from vagina (two years after cessation of cotamenia). T.

Uterus low down and anteverted, twenty days after the last dose, and for the first time in life. T.

Chest.

Feeling as of a lump in centre of chest, moving down at empty swallowing and immediately returning. T.

Full breath prevented by severe colicky pains. B.

80 Sharp, quick pain in left chest. T.

Pain in left side, as if heart were violently grasped and released, interrupting pulsation and breathing; relieved by rubbing and pressure. G.

Pain in region of heart in the afternoon; aggravated by

stooping, leaning forwards, or bowing, and most, by lying down at night; better in morning and forenoon. G.

Dull, heavy, or pressive pain in region of heart. S.

Pressive pain in region of heart. S.

85 Dull, pressive pain in left side, apparently about the heart. G.

Heaviness in region of heart. S.

Constant heavy feeling in left side, in region of heart. S.

Fluttering of heart. T.

Throbbing of heart, causing catching of breath. S.

90 Palpitation of heart. T.

Heaviness in region of heart, and palpitation when lying on left side; worse at night, and when lying down. S.

Back.

Dull pain in lower back and sacrum. T.

Constant pain between the hips. T.

Cold feeling in the back, as of cold water poured down the back. T.

95 Pain in the back. T.

Pain in sacrum. T.

Cold chills in the back at night, and hot flushes in the morning. T.

Loins.

Steady pain in lumbar regions. B.

Dull, occasional, shooting pains across small of back. S.

100 Dull, heavy pain and great weakness in small of back and loins. T.

Upper Extremities.

Pain between shoulders. B.

Cold hands. T.

Cold perspiration on back of hands. T.

Quick pain in ring-finger of each hand, and corresponding toes, lasting a few seconds. S.

Lower Extremities.

105 Severe, fleeting, circumscribed pain on inner side of left thigh. S.

Sharp pain in left thigh, two inches below Poupart's ligament. S.

Quick pains in lower limbs. S.

Coldness of lower extremities, as from wind: *cured.* D.

Weakness and pain in knees when walking. S.

110 Weakness and pain in knees, particularly in ascending. S.

Sharp, circumscribed pain in both knees, at the internal condyles. S.

Pain in knees. S.

Dull, heavy pain from knees to toes, shifting suddenly from place to place. S.

Formication below the knees. S.

115 Circumscribed shifting pains below the knees. S.

Smarting of right leg: *cured.* D.

Tingling in legs. G.

Legs dull, heavy, and full. S.

Coldness of outer side of left leg, as from wind. G.

120 Pain in ankle-joints, worse when moving. S.

Cold feet. T.

Cold perspiration on feet. T.

Pulsation in both feet. S.

Dull, boring pain in top of left foot. S.

125 Quick pain in fourth toe of each foot, lasting a few seconds. S.

VI.

IRIS VERSICOLOR.

BY C. WESSELHOEFT, M.D.

Botanical Characteristics. — The common Iris, or blue-flag, is a perennial herb with a one-angled stem, from two to three feet high, with two, ranked, equitant, sword-shaped leaves which are more than half an inch wide. It springs from a root-stock or subterranean stem, and is furnished with two-leaved spathes, and ephemeral, blue flowers, variegated with green, yellow, and white at the base, and veined with purple. These are followed by oblong pods, with three rounded angles and convex sides. The perianth consists of six parts: three outer, larger, reflexed; three inner, smaller, erect. Alternate with these last, and under the petaloid stigmas, are the three stamens. These parts are apparently seated upon the obtusely triangular, flat-sided ovary, which develops into oblong, three-celled pods, filled with flat seeds.

This common plant can be confounded with no other indigenous species except the Iris Virginica, which has a round stem, leaves less than half an inch wide, and each side of the ovary deeply two grooved. The Iris lacustris, a dwarf species, grows on the shores of Lakes Huron and Michigan. Iris cristata, another dwarf species, may be found in the mountains of Pennsylvania, and several foreign species are common in cultivation.

The rootstock has long been used as an emetic, cathartic, and diuretic. From it is prepared a resinoid, known as iridin.

PROVINGS BY C. WESSELHOEFT, M.D.

Observation I.

June 19, 1867.— While preparing the tincture, he chewed a slice of the fresh root; the taste was at first sweetish, and resembled that of slippery-elm bark: he thought it quite insipid at first, but, after about five minutes, there began a smarting, burning, and scratching sensation in the soft palate, at first slight, but slowly increasing to a violent fiery heat, spreading over the whole extent of fauces, upward toward the nares, and far down into the œsophagus. The throat felt as if it were three times as large as usual, and like a fiery cavern. Drinking water alleviated the burning for a short time only. Many enlarged bright-red blood-vessels became visible on the uvula, palate, and posterior wall of fauces. The heat, redness, and painful burning lasted for two hours and a half, very gradually subsiding. He was suffering from severe (habitual) headache at the time; this headache disappeared entirely in half an hour, though hitherto it had invariably lasted till he went to bed.

Observation II.

Oct. 29, 1867, ten, A.M.—Took two drops, fifth dec. dil. Immediate dizziness, with pressure in forehead; pressure towards and out at the ears; stiffness in trapezius muscles; pinching at pit of stomach. After twelve hours, rattling of mucus in the chest, not to be raised by hawking. Awoke at night with severe tickling under the top of the sternum, and cough, dry and distressing, because nothing could be raised nor the tickling reached. Rattling of loose phlegm low down in the windpipe.

Oct. 30, ten, A.M. — Catarrhal mucus in a lump rattled up and down the trachea; at length it was expectorated with a sweetish offensive taste. Obstruction and catarrhal soreness of air-passages; frequent hawking. Cough, with soreness in trachea; also tickling, without further expectoration. In the morning,

soreness of the chest, across from nipple to nipple, with a tender, painful spot on right border of sternum; pain on inspiration. Felt as if he had taken a cold, with lameness of trunk and lumbar region. Sudden rheumatic lameness of posterior femoral region while exercising in the morning, causing a limp (after twenty-two hours).

In the course of the morning, the pain took the direction of left sciatic nerve; could not walk without limping; pain shooting from behind large trochanter, down posterior part of left thigh into the foot on every motion, — particularly while walking, — till four, P.M., when it passed off; marked sciatica of left side. Never had anything of this nature before; when he takes cold, it never assumes the form of rheumatism or neuralgia.

Oct. 31. — Had slept well all night, but immediately on rising had severe pain in left sciatic nerve, only in walking; pain more acute and with more soreness than yesterday. Pain only on motion, with weakness of the left leg; cannot walk without limping; yet violent exertion, running or jumping, does not increase the pain more than moderate exertion. Slight hacking cough in the morning without expectoration, with soreness in the larynx anteriorly. Appetite, stools, and urine, normal.

Observation III.

The prover had been suffering from sore throat for five days, with irritation of larynx in the evening, and dryness and burning along the edge of soft palate, which awoke him nights; the tonsils were swollen, and painful on swallowing.

Dec. 1, 1867, ten, A.M. — Took ten drops, fifth decimal dilution. The sore throat did not trouble him throughout the day. In the evening, painful drawing and lameness behind left trochanter, extending down to the popliteal space; it lasted for an hour, causing him to limp.

Dec. 2, nine, A.M.—Ten drops; and a similar dose at ten, P.M.

This was followed by slight sciatic pain. The sore throat has been decidedly better all day; no smarting at night.

Dec. 3, ten, A.M. — Fifteen drops; throat symptoms entirely gone this forenoon. Had to run a long distance in the afternoon to reach the cars. Got very much heated and into a profuse perspiration. Took cold in the cars. Sore throat again in the evening; burning, smarting, dryness of palate and fauces; feeling as if a horsehair were drawn tightly across the soft palate, with burning and smarting. Took ten drops in a tea-spoonful of water on going to bed. For half an hour the smarting increased. Slept two hours, and awoke without the smarting. Slept all the rest of the night, and in the morning raised some loose mucus without coughing. Never had these sore throats without subsequent severe coryza and catarrhal cough for several days; in this instance, the affection was decidedly arrested at the outset.

Since taking the Iris, has had soreness of the roof of the mouth, with roughness of the hard palate, very painful on being touched with the tongue or solid food, for several days. This is aggravated by a defective, filled tooth, painful, feeling too long, and very tender when used. Soreness of hard palate.

Urine scanty and of strong odor; very dark and thick in the morning; it passes without force, and only after some straining, but without pain. Stools costive, and absent altogether for two days.

Observation IV.

From December 13 to 18, he took daily a dose of the third dec. dil. of Iris at ten, A.M., and at bedtime; beginning with ten drops and ending with twenty-five.

Dec. 16. — In the morning, while writing, felt sciatic twinges behind left trochanter, several times, quite severe, with lameness.

Dec. 19 and 20.—Took the first dec. dil. night and morning, beginning with ten drops, and ending with twenty.

Dec. 19. — Soon after taking the medicine, nauseous feeling in abdomen, like the beginning of sea-sickness; a faintness as if intestines were being revolved in the wrong direction, lasting several hours. The same sensation recurred toward evening.

Dec. 20. — In the morning, first, stiffness in the back, increasing on sitting down; on rising, a violent, painful tearing in the lumbar region, making it impossible to straighten the body into an erect posture for several moments; can gain the erect posture only very gradually. The loins and the back between the shoulders remain stiff all the morning.

Urine thick, of strong odor, and deep amber-color (owing to excess of uric acid); it flows without force, and even requires some effort to discharge it, but without pain.

Considerable stiffness of latissimus dorsi muscle of right side, on moving, but not on touch or pressure. Sciatic pains, — as if left hip-joint were wrenched, or forced to remain long in an awkward position, — several times in the day.

In the morning, soon after taking the medicine, acute pains in the head, as if the top of head would come off; felt chiefly in forehead and vertex, after having been in the cold air, and on making quick motions.

Dec. 21. — Several times throughout the day, neuralgic pains, — like severe constriction around left upper-arm, forearm, and thigh. Several times, sciatic, (neuralgic) twinges in hip joint; pain as if wrenched, followed by a burning ache.

Observation V.

Jan. 26, 1868, ten A.M. — Took ten drops of tincture in a table-spoonful of water. In a few minutes, heat about fauces, soft palate, and tonsils, soon changing into smarting and burning; relieved by inhaling cold air: deglutition not painful but more difficult; the burning lasted over two hours. While walking in the evening, slight coxalgia in left hip. Difficult deglutition

while eating, after eight hours. Food sticks in the pharynx, requiring several efforts of deglutition to swallow it.

Jan. 27, ten, A.M. — Took ten drops of tincture in a little water. Burning and smarting of palate and fauces for two hours. Heart-burn, several times in the day; a hot, cramp-like sensation rises upwards from pit of stomach. Frequent empty eructations, in the course of the day.

The habitual headache, consisting of a violent pressing and throbbing in right or left side of frontal protuberance, — worse in the evening and after bodily exertion; better during moderate exercise in the open air, — has not made its appearance since taking the Iris.

Feb. 27, ten, A.M. — Thirty drops of tincture in a tea-spoonful of water. Burning and smarting of palate and fauces for several hours. Increased appetite, after larger doses of tincture.

After the last date, I took, at various intervals, several doses of the pure tincture, varying from twenty to fifty drops, without experiencing anything more than slight twisting pain in the stomach, and very frequent spasms of the œsophagus, with inability to swallow; the food sticks in the throat with choking and gagging. The rheumatic and neuralgic symptoms were not, in my case, developed by the pure tincture, which caused merely some local gastric disturbance.

PROVING BY MRS. N——.

OBSERVATION I.

Took Iris at quarter to eleven, A.M. — At once felt a sudden dizziness, soon passing off. In half an hour, felt a slight pain in bowels with heat and soreness, as after a cold, and with premonitions of djarrhœa; this lasted for three hours. After that, her arms between elbow and shoulder became very lame, as after severe exercise; also sore to the touch. The lameness soon extended to the shoulders and back of the neck, like rheuma-

tism after taking cold. Heat of the palms. In the evening, frontal headache with dizziness occasionally.

Had been troubled for the past few days with nausea and disordered stomach; but after taking the medicine, this feeling passed off, and ate a hearty dinner. During the night, the stiffness and lameness disappeared; but was followed by sore throat with slight soreness of the chest. In the morning, raised some phlegm.

Menses (always regular and profuse) appeared three days later than usual, and were scanty.

Observation II.

Oct. 29. — Took two drops of fifth dec. dil. Followed by immediate dizziness. Stiffness of trapezius muscle causes constant shrugging of shoulders and desire to twist the head from side to side; lasted all the forenoon.

PROVING BY MISS S.

Oct. 29, 1867. — Took two drops of the fifth dec. dil. before going to bed. Slept well all night, and felt well on waking.

Oct. 30. — Took a similar dose at five, P.M. Slight pain in forehead, changing from side to side. Heavy feeling in hands and elbows, as if the prover had been drinking wine. Pain in the back.

Oct. 31. — Pain in the small of back all day while sewing. Pain in forehead at intervals. In the afternoon, heaviness of elbows and hands, with pain in the back between the shoulders, which finally settled in right arm, between elbow and shoulder.

PROVING BY A. F. SQUIER, M.D.

Jan. 6, 1868, half past twelve, P.M. — Took one drop of tincture of Iris on Sacch. lact. In fifteen minutes, slight burning in fauces, as if from taking cayenne pepper; only felt in expiration; continued till he went to sleep.

Jan. 7, ten, A.M. — One drop. In five minutes, the same burning in fauces, more severe, extending slightly to tip of tongue; it was felt slightly on inspiration; quite severe during expiration. Tonsils, uvula, and soft palate, bright-red, with engorgement of larger vessels.

Jan. 17, eleven, A.M. — Took five drops on large quantity of Sacch. lact. Up to twelve, M., felt only slight burning in back of mouth, fauces, palate, and course of œsophagus.

March 9, half past one, P.M. — Took one drop. In five minutes, some burning in fauces, palate, tonsils, and back of tongue; increased very much during expiration; diminished very much during inspiration. In ten minutes, slight dull pain in right temple, which in five minutes passed over top of head, behind left ear, and ceased in about one minute more.

Quarter to two, P.M. — Took three drops. Almost immediately, increase of burning in fauces, mouth, etc.

Two, P.M. — Took five drops. Increase of burning in throat, etc. Slight nausea. Slight momentary dullness of head (resembling vertigo). The burning, as before described, diminished gradually until evening.

March 11. — Took seven drops. Burning in fauces as before.

Half past eleven, A.M. — Took nine drops. Some burning in throat; burning extends down the course of œsophagus to pit of stomach, with slight nausea.

Ten minutes before noon. — Took twelve drops. In five minutes, dullness of head (mental faculties and special senses); slight pain in right temple; excessive burning in the throat, etc., as before. In ten minutes, slight nausea with much belching of wind.

Five minutes after noon. — Took twenty drops in a fluidrachm of water. No increase, but a continuance of the same symptoms during afternoon, with burning in œsophagus; symptoms gradually wore off towards evening.

On the 10th of March, quite a severe tracheitis developed itself, with hard cough, tickling in larynx, and rattling in lower part of lungs. Taking the Iris on the 11th did not affect this in any way; and from this fact, and also being subject to this affection, I have not entered it regularly in the proving. On the other hand, I am not conscious of having experienced the exciting cause of this trouble with me; viz., a cold: also a nasal catarrh, with which I am always affected in winter, has been very much aggravated since taking the medicine.

PROVING BY GEORGE F. BUTMAN, M.D.

March 9, half past one, P.M. — Took one drop, on sugar of milk. In five minutes, burning in the throat, palate, and tonsils; increased by expiration, diminished by inspiration.

In ten minutes, action of heart increased in force and frequency: pulse, 89 (normal, 72). Slight dull pain at situation of posterior fontanelle.

Quarter to two, P.M. — Took three drops. Increase of symptoms of throat, etc. In five minutes, nausea, headache; headache gradually diminished. In fifteen minutes, burning in throat, and nausea increased.

Two, P.M. — Took five drops. Same throat symptoms as in the morning.

March 10, six, P.M. — Sharp, griping pain in bowels for five minutes. Slight nausea, eructation of much wind. Slight pain in forehead, and considerable in posterior fontanelle.

March 11. — Took nine drops on a large quantity of sugar of milk. Increase of throat symptoms. In eight minutes, burning extends down œsophagus to stomach; feeling of fullness of stomach, followed by eructations of wind, which relieves it.

Ten minutes to noon. — Took twelve drops. Increase of throat symptoms. In ten minutes, sleepy, dullness and dizziness of head; nausea, belching of a large quantity of wind.

Five minutes past ten, P.M. — Took twenty drops, in a flui-

drachm of water. In eight minutes, sharp neuralgic pains in bowels.

PROVING BY MRS. D. B. H.

Iris versicolor produced slight giddiness, coming on suddenly, while walking within doors. Lightness in the head after the giddiness. Weakness of memory, in twenty-four hours. Cramp in the left side, like a knife, lasting a few minutes; followed after a while by darting pains in the bowels.

PROVING BY MR. D. B. H.

Iris produced tightness across the forehead. Nervous fretfulness, lasting all day; cramp in left side, under the ribs.

PROVING BY MR. C. B. FOX.

The symptoms were: Toothache; tongue and gums greasy or slimy in the morning; cracked lips; rough throat, running saliva; bad taste; flatulence; looseness of bowels; pain in the fingers.

The last three provers took the fifth dec. dil. night and morning. They were unused to describing their bodily feelings. Though very intelligent people, they have not succeeded in stating their symptoms correctly, with regard to conditions, and time of occurrence; but perfect reliance may be placed on what they have noticed.

PROVING BY WM. A. BURT, M.D.*

OBSERVATION I.

May 15.—Took three grains of the green root at three o'clock, P.M; the acrid property was strongly marked; back part of the mouth and fauces felt on fire all the afternoon; profuse flow of saliva.

---

* This and the following provings are copied from Hale's New Remedies, p. 263, *et seq.* *Irisin* has been changed to the more proper term *Iridin*.

Eight, P.M. — Took three more grains; slept well, but had a discharge of semen, with amorous dreams, something I am not accustomed to.

May 16. — Mouth and tongue feel as though they had been scalded; natural stools; anus feels sore, or as if sharp points were sticking in the parts.

Eight, A.M. — Took ten grains; so acrid that it was with difficulty that I could get my breath; constant discharge of ropy saliva dropped from my mouth during conversation; constant distress in the anus, feeling as if it were prolapsed.

One, P.M. — Took twenty grains of the dried root; no acridness to it; great distress in the stomach half an hour after taking it; lasted two hours; no other symptoms.

May 17. — Took thirty drops of a poor tincture; no symptoms, except that the next morning I awoke feeling very irritable.

May 18. — Took forty grains of the green root; fifteen minutes after, profuse flow of saliva and tears; mouth and stomach feel on fire; almost impossible to breathe, it is so acrid; a half-hour of great pain and distress in the stomach; it is awful to bear; continued all the afternoon and evening; it is not a sharp pain, but an awful, burning distress; appears to be deep in the region of the pancreas; cold water does not touch it; profuse flow of saliva all day; constant eructations of tasteless gas; sleep, very restless all night, with bad dreams.

May 19. — Awoke at four o'clock, A.M., with great rumbling and distress in the umbilical and hypogastric regions, and with great desire for stool; followed immediately by a copious, thin, watery stool, which could not be retained a moment without much pain; mouth feels as if it had been scalded; tongue thick and rough.

Eight, A.M. — Another thin, watery stool, with great rumbling in the bowels; no appetite; loss of taste.

Eleven, A.M. — Took forty grains; acridness not felt so much.

One, P.M. — In great distress in the epigastric region; the distress is horrible to endure; profuse flow of saliva.

Half past two, P.M. — The distress in the epigastric region is still increasing; very restless, cannot be still one moment; think I cannot live; very much frightened; copious discharge of thin water from the bowels, but no abatement of the awful agony in the epigastric region; inhaled chloroform, which gave a little relief.

Quarter past three, P.M. — Another large stool of water tinged with bile; the water ran from the bowels in a continuous stream; nearly two quarts of water passed; there was great rumbling in the bowels, but no pain; this gave great relief; felt quite well at bed-time; sleep very restless; amorous dreams, with discharges of semen.

May 20. — Very irritable throughout the day; otherwise quite well.

I had constant eructations of tasteless gas during the whole period.

Observation II.

June 8. — Took fifty grains of the green root, chewed it, and swallowed the juice at half past eleven o'clock, A.M.; immediately, a great burning distress in the epigastric region, but not much in the mouth; profuse flow of saliva; the burning pain in the stomach is awful; cold water does not seem to reach it.

Half past two, P.M. — Large, yellow, papescent stool, with great rumbling and no pain; five minutes more, another large, watery stool; the burning in the pancreas(?) is fearful to endure; constant rumbling in the bowels, but no sharp pains.

Quarter to three, P.M. — Another watery stool with colicky pains in the epigastric region; flow of saliva abating.

Half past five, P.M. — There has been severe colic in the epigastric and umbilical region for the last two hours; every few moments, copious watery stool, with great rumbling in the bowels.

Six, P.M. — Great pain and distress in the bowels; followed by a large watery stool, still the pain continues. Begin to feel very faint and exhausted; knees weak and trembling.

Half past six, P.M. — Another watery stool; anus feels on fire.

Seven, P.M. — Another watery stool, with a disposition to strain and bear down; great burning in the anus; food rises very sour.

Nine, P.M. — Another watery stool, with straining; anus feels on fire; becoming very much exhausted, I was compelled to retire.

June 9, four, A.M. — Great rumbling in the bowels, with desire for stool; had a profuse one of a watery nature, followed by great straining, with the passage of a little mucus.

Five, A M. — Another watery stool, followed by great straining, with the passage of blood and mucus.

Half past five, A.M. — Another stool of mucus, streaked with blood, with great tenesmus.

Seven, A.M. — Stool of water and mucus, with great straining; mouth tastes flat; tongue feels thick.

Nine, A.M. — Another copious stool of water and undigested food, with great straining; have become very much exhausted; eyes much sunken in; teeth feel too long, and are very sore; dull, heavy headache; very hoarse; urine, very scanty, deep-reddish color; stomach very sour; bowels very tender on pressure; loss of appetite.

Half past ten, A.M. — Another stool of mucus and water, with great tenesmus, and rumbling in the bowels; dull, heavy headache in the forehead; calves of the legs pain very much when walking, especially the right; thick, flat taste in the mouth.

Quarter to one, P.M. — Small stool of mucus, with great tenesmus, and rumbling in the bowels; almost impossible to walk, my limbs are so weak and painful; for the last six hours the mucus membrane of the anus has been prolapsed, with great smarting pains.

Three, P.M. — Another small stool of mucus, with severe tenesmus; urine very scanty, and burning when voided; constant eructations of sour gas; flying pains all through the bowels.

June 10. — Dull, heavy headache in the frontal region; flat, thick taste in the mouth; quite hoarse; urine very scanty, red, and burning the whole length of the urethra for half an hour after voiding it; inflammation of the glans penis; it is very much swollen and red; severe back-ache; teeth all feel sore and elongated.

June 11. — Feel quite well; little hoarse; inflammation in the glans penis about gone.

June 13, four, P.M. — Natural stools; urine about natural.

June 15. — Very hard, lumpy stool; anus feels prolapsed; pained all day.

June 16. — Very severe back-ache, but otherwise well; for two weeks, occasionally severe shooting pains would pass through my temples several times a day.

I was surprised that no constipation followed such a long course of diarrhœa.

OBSERVATION III. (*with Iridin.*)

May 26, eleven, A.M. — Took four grains of the first decimal trituration. Twelve, M. — dull, heavy headache in the forehead; by spells, sharp pains in the temples; tight, constrictive feeling of the scalp. Quarter past three, P.M. — Food rises very sour.

Half past three, P.M. — Took eight grains. Ten, P.M. — Soft, papescent stool without pain, but rumbling in the bowels; dull headache in the frontal region; very restless at night, dreams of fighting, etc.

May 27. — Great deal of rumbling in the umbilical and hypogastric regions, with desire for stool; had a soft, papescent stool, without pain; flat taste in the mouth; teeth feel elongated and

sore,— back, upper and lower molars,— dull, heavy, aching pain in them for three hours; pain in the forehead and left temple; pain in the temple very sharp by spells; passed water but twice during the day, very red in color; restless night; discharge of semen, with amorous dreams.

May 28, nine, A.M. — Took ten grains; frequent eructations of tasteless gas; rumbling all the afternoon in the umbilical region; pain in the right kidneys — lasted three hours; teeth still feel elongated and sore; great desire to sleep in the daytime; fell asleep while reading; dreamed of dissecting a woman who was hanging up by the heels in my office; awoke very much frightened; made several attempts to get up to shut the door, but could not; it was a real nightmare.

Half past four, P.M. — Took fourteen grains; soft, papescent stool at nine, P.M.; hands hot and dry all day; dreamed of snakes and everything bad; discharge of semen; restless night; teeth still sore.

May 29, nine, A.M. — Took twenty grains. Hands hot and dry all day; cannot fix my mind on my studies; constant eructations of tasteless gas; great diminution of the secretion of urine; made a very little water morning and night, followed by great burning in the urethra for half an hour after voiding it; dull, heavy headache in the forehead and temples; by spells the pains in the temples are very sharp and shooting; dull, heavy pain in the lumbar region all day; soft, papescent stool at two, P.M.

Five, P.M.— Took thirty grains; restless night; horrid dreams; great rumbling in the bowels all the time; discharge of semen, with amorous dreams.

May 30. — Mouth tastes flat; tongue coated white; dull, heavy headache in the forehead and temples; at times the pain in the temples is very sharp; constant pain in the lumbar region, aggravated by motion; urine very scanty and high colored; very soft, yellow stool, with great rumbling in the bowels, but no pain.

May 31, three, A.M. — Took forty grains Dull heavy headache all day; great pain in the lumbar and sacral regions; almost impossible to walk. Twelve, M. — Took eighteen grains; soft, mushy stool at evening, with great rumbling, but no pain; restless night; bad dreams.

June 1. — Dull, heavy headache; back pains me very severely; very much worse by walking. Eight, A.M. — Soft, papescent stool, with great rumbling in the bowels; constant eructation of gas.

June 2. — Took five grains of the pure Iridin; good deal of pain in the forehead and temples. Five, P.M. — Severe colic in the umbilical region; pains came on every few minutes; lasted two hours; great rumbling in the bowels; soft, papescent stool in the evening; restless night; dreamed of digging up dead people, and finally fell into a grave, which awoke me, feeling very much frightened.

June 3. — *Top of the head has just twenty-six pustules on it, some of them as large as a three cent piece;* the pustule is situated upon an inflamed base of a rose color, with red streaks running from one to the other. They contain yellow matter; very tender to the touch; gradually disappeared in four days. Took ten grains at four, P.M.; dull, heavy pain in the forehead and temples; great rumbling in the bowels; very restless night; dreamed of the dead as usual; discharge of semen.

June 4. — Flat taste in the mouth; teeth sore; natural stool; took twenty grains at nine, A.M.; dull heavy pain in the forehead and temples; the pain in the temples is very sharp at times; very restless night; awful dreams of the dead; discharges of semen.

June 5. — Flat taste in the mouth; headache is very troublesome to-day; dull, heavy pain in the lumbar region all day. Five, P.M. — Soft, papescent stool, with pain in the umbilical region; restless night, with bad dreams; discharge of semen.

June 6. — Dull, heavy headache; back pains me very much;

had the soft, painless stools, with great rumbling in the bowels; increase of urine; urinated eleven times profusely.

June 7. — Natural stool; back-ache all gone, but voided urine in large quantities.

June 8. — Feel well, but pass urine in large quantities; stool natural.

PROVINGS BY J. G. ROWLAND, M.D.

The following provings, with one or two exceptions, were made from the tincture prepared in the customary manner. The attenuations used were made on the decimal plan. No. 1 used the third and first dilutions, and the mother tincture; No. 2 and No. 3, same; and No. 4, the first trituration.

No. 1. — About fifteen minutes after taking the third dilution, an uneasy feeling was experienced in the scrobiculus cordis, together with rumbling in the lower part of the abdomen; these symptoms increased until the lower part of the sternum seemed protruding; nausea and eructations of wind; dull pain in the right parietal protuberance, which increases steadily until it becomes a hammering pain, and so much aggravated by motion, that for the moment it appears unbearable, but by continual movement it gradually abates, returning again when at rest; rheumatic pain in the right shoulder, worse on motion, especially by raising the arm; a disposition to feel displeased with everything and everybody, which gives place to a feeling of liveliness and activity, immediately after taking the first dilution; sneezing; nausea and slight vomiting of watery and extremely sour fluid. About two hours after, stitch in inferior part of occiput, more on the right than on the left side; severe rheumatic pain in the whole right arm and right knee joint, worse on motion, and continuing when at rest; acute and extremely severe boring pain in right parietal protuberance, causing him to bend down his head; pain in the left side, as though the ribs were pressing hard upon the lower portion of

the lung; unable to take a long breath, for the pain in the left lung, which was of a sticking and cutting character; a short, dry cough, excited by tickling in the larnyx; slight toothache in a warm room; headache, much aggravated by coughing; rumbling and uneasiness in the stomach, accompanied by diarrhœa, with little pain; stools, lumpy, brown, and very offensive; sweat over the whole body, particularly in the groin; dry cracked lips; a sharp, cutting pain in the urethra, when commencing to urinate.

After taking medicine five days, several small vesicles appeared on the right wrist, which gradually formed into pustules, having a depression in the centre; these dried up in the night, leaving crusts, which remained nine days before disappearing. (The prover thinks it proper to state he had been attending a severe case of small-pox.) Half an hour after taking nearly half an ounce of the mother tincture: a feeling of rawness in the throat; general languor; ill-humor; inability to fix the mind on any subject; when writing, mind will wander to other things; diarrhœa, with colic; nausea, and vomiting of a thin watery fluid of an exceedingly sour taste; constant nausea for more than an hour, and vomiting several times; diarrhœa, with rumbling and cutting in the lower part of the abdomen; heat over the whole body, then chilliness, with cold hands and feet; head feels very heavy, the eyes dull, with pain directly over the left superciliary ridge; severe burning pain in the internal canthus of the right eye, the eye filling with tears; sensation of fullness of the head; head feels hot, and face flushed; whenever attempting to laugh, a sensation as though a band were drawn tightly around the forehead. The day after taking the mother tincture, feeling of sleepiness, with great chilliness; only at all comfortable when near a hot fire, and even then, cold, chilly sensations are felt down the back; violent tearing pain in the right hip-joint, knee and shoulders, very severe indeed; the most severe only lasting about three minutes; vomiting of the sour matter before mentioned. Great chilliness over the whole body the

whole night, although abundantly covered; weakness; despondency; thinks he is going to be very sick, then a disposition to laugh at his fears, which, however, soon return; dreams of suffocation and fire. Cutting and sticking in the urethra when making water, with coldness and itching over the genitals, the itching being worse on scratching; six dysenteric stools during the night, with pain and rumbling in the lower part of the abdomen; also great lassitude; after these symptoms have abated, there remains a sore throat and slight headache.

No. 2. — Feeling of weakness and weariness in the lower part of the back; pain of a dull, aching character, in right hypochondrium when walking; pains in the right, then in the left knee when walking; feeling of weariness in the back for several days; sharp pain near outside of left arm when moving it; swelling of gums, on the inner surface of left side of lower jaw, under the molar teeth; pain in left hip-joint, when walking; redness of the conjunctiva, as if from cold; for a day or two much fetid flatulence; pain in abdomen, which is relieved by discharge of flatus; sharp pain in first joint of great toe of right foot, when walking, renewed frequently during the day; pain in last joint of middle finger of left hand; a number of shooting, shifting, and momentary pains in the phalangeal and metacarpo-phalangeal articulations, all of these pains coming on more during the evening, and being worse on motion; boils on back, face and hands; pain along posterior part of crista ilii of the right side; urine more copious; the pain in first joint of great toe occurs during walking, for a number of days; pain in left thigh; pulse accelerated. After increasing doses, more frequently renewed: empty eructations and pain in the stomach; unusual restlessness during the night; sleep disturbed by startings; aching pain in the stomach before breakfast; *pains tensive and sticking in right shoulder during motion, particularly on raising the arm.* (This symptom set in soon after commencing the proving, continued six weeks after discontinuing the medi-

cine.) Pains in the metacarpal joints of both hands, muscles of right arm, and pectoralis-major, mostly during motion and in the evening. Awoke two hours earlier than usual, with no disposition to renew sleep; pain in bowels, going off by discharge of flatus; feeling of a greasy coating over mouth and tongue, early in the morning; aching pain in the stomach after drinking cold water; pains through the day in almost all the limbs; urine increased in quantity; *tensive, momentary, and constantly recurring pains,* — in all the joints, but mostly the *smaller,* — which *shift rapidly about,* mostly in the evening, that is, from supper to bedtime; pain in abdomen above the crest of the ilium, both sides; after breakfast a diarrhœic stool, with subsequent pain in the epigastrium; in writing, pains in phalanges of right hand, and in the end of the index finger of the same hand. (Observed several weeks after proving.) Pain in left thigh; shooting, sticking pain in the right foot; continuous sharp pain along the left side of the first phalanx of middle fingers of right hand; sharp pains in the middle fingers of left hand, succeeded instantly by a similar pain in axilla of same side. (Occurring frequently during about five minutes.) Sudden diarrhœic stool after supper; sharp, cutting pain, frequent in the metacarpo-phalangeal articulation of thumb of the right hand; vexed, irritable mood, disposed to find fault. (Proving No. 2 was made by the same individual, at three different periods.)

No. 3. — Pulse somewhat accelerated; headache for two days; the third day he was seized with a peculiar headache; the pain shot, as he describes it, like an electric shock, from the right temple to the left part of occiput, and continued for about half an hour; headache, with great depression of spirits and general debility; crampy pains in the right lumbar region in the evening, continuing several hours, and causing a sweat to break out. Woke up unusually early, with dry mouth and general depression; headache occurring irregularly several days;

observed a pimple on middle finger of left hand; the next day the inflammation was extended over the hand; the day after it became more violent, and occasioned great pain, and was afterwards opened to obtain relief; no pus was found, but it was subsequently formed, and discharged through the opening, which penetrated as far as the bone; a fungous growth meanwhile had taken place around the edges; pain extended from this hand up the arm; there was much swelling and pain* in the part affected, which had much the appearance of a malignant boil; there was a disposition to a similar formation on the index finger, but the inflammation subsided after a time, and finally disappeared; during the proving the urine was very copious, and had a strong disagreeable odor; restlessness for five nights in succession; headache, with pain in the bowels; sickness of stomach in the evening, obliging him to lie down; pain in left side of chest.

No. 4. — Colicky pains during the evening and night, obliging him to bend forward for relief, and attended with loss of appetite and great restlessness during the night; this colic continued the next day, but was immediately removed by a dose of Nux vomica; no appetite the next day; restless at night with troubled dreams; several pimples on lower extremities and other parts of the body, like mosquito bites; constipation several days; languid and feverish in the afternoon; no disposition to mental or physical exercise; next day flushed face, fever, drowsiness and loss of appetite; weakness and languor, with rumbling in the bowels; the morning after, a thin watery diarrhœa, continuing through the day; debility and loss of appetite; diarrhœic stools the next day, succeeded by pain in the umbilical region; colic in the afternoon, ceasing at night.

CHARACTERISTIC PECULIARITIES. — The symptoms appear

* The pain in the finger was accompanied by perspiration, although the weather was cold.

mostly in the evening and at night. (In myself, the symptoms appeared mostly in the daytime.) Pain aggravated by motion; right side most affected.

PROVING BY WM. H. HOLCOMBE, M.D.

I procured an exceedingly strong mother tincture of the Iris from my friend Dr. Bailey, who prepared it from the root of the blue flag, which abounds in the swamps around this city.

I took two or three drops of this tincture, in about a tablespoonful of water, four times a day. I was in excellent health, every organ performing its function to perfection. I am of the sanguino-nervous temperament. I made no change whatever in my diet or habits. I drink coffee once a day, and use neither liquors nor tobacco.

1st day. — No symptoms but the acrid taste of the plant and a good deal of hawking and clearing out of the larynx.

2d day. — No symptoms but a slight, dull, stupid headache.

3d day. — Waked with neuralgic pains in the right side of the face, darting stitches in two carious teeth. Pain affects especially the infra-orbital nerve. No appetite at dinner. In the afternoon, severe colic, first in the right and then in the left flank, with urging to stool. Very frequent, copious, perfectly limpid urine. Facial neuralgia passed off. Pleasant night.

4th day. — Facial neuralgia, involving the supra and infra-orbital and the superior maxillary and the inferior dental nerves; began after breakfast, with stupid or stunning headache, and lasted several hours with great severity. Same copious, limpid urine. In the afternoon, a good deal of fetid flatulence; two greenish black stools, with burning at the anus.

5th day. — Neuralgia of the same nerve began after breakfast, and continued with terrible severity for twenty hours. Violent headache accompanied it, and general malaise. Urine became less frequent, and quite high-colored. Some disposition to stool, with burning at the anus. I was worn out by fatigue

and suffering. I got no relief or sleep but by the inhalation of chloroform, and I abandoned the proving.

6th day. — Dull soreness where the neuralgia had been. Violent call to a second stool by a sensation as if wind were forcibly distending the rectum. No wind was discharged, but I was relieved after discharging a little greenish dark matter, attended with severe burning in the anus.

7th and 8th days. — No symptoms but a frequent and painful hawking (screatus) of a tough mucus from the larynx, and diminishing burning after each stool.

The inference I draw from this fragmentary proving is, that Iris in small doses, often repeated, acts on the male system, sanguino-nervous constitution, — especially in the morning, especially on the right side, — from the right to the left, from above downwards, from the animal system to the organic system; indicated in the former by facial neuralgia, and copious limpid urine; in the latter by flatulent colic and burning tenesmus.

Dr. Kitchen first recommended Iris as a remedy in neuralgia of the head and face. This little proving may contribute something towards the anatomical localization of its curative power.

A friend of mine, of rare biological powers, psychometrized this medicine for me. It produced in him terrible paroxysms of coughing. He said it ought to be the best remedy for acute inflammatory bronchitis, and for painful menstruations; but as biological provings are not yet accredited, I will say no more on the subject. Iris has done me good service in sick headache, neuralgia, bronchitis and dysentery.

CLINICAL OBSERVATIONS.

Samuel Gregg, M.D., of Boston, says: "I have not made note of its operation sufficiently to recommend it with implicit confidence. I have relied much upon it in a peculiar irritability of the throat, palate, and pharynx, coming on without any appearance of inflammation, and sometimes attended with cough.

I have also relied upon it much in nocturnal emissions, particularly those attended with amorous dreams; also in secondary gonorrhœa or gleet."

F. H. KREBS, M.D., of Boston, writes that he has given the Iris with satisfactory result in sick headache, when it appeared in bilious subjects, with gastric derangement and dyspepsia, and attended with tenderness in the region of the stomach and liver; also in cases of protracted nausea and vomiting during pregnancy. He finds the principal indication for Iris in the "profuse flow of saliva," which seems to be one of its characteristics. Dr. Krebs considers Iris as one of the best remedies for "morning sickness" during pregnancy. He has always given this remedy in the third decimal dilution.

J. HEDENBERG, M.D., of Medford, Mass., says that his experience with Iris is confined to cases of headache with nausea and vomiting (sick-headache). He considers it useful as a palliative during the paroxysm, and is aware of no case in which the paroxysms have not recurred as usual.

L. D. PACKARD, M.D., of South Boston, reports: "I have used the Iris in cholera-morbus many times, and always with success. In some cases, it acted like a charm in relieving the vomiting and the cramps in the bowels. It relieved also in 'bilious colic.' In about a dozen cases of diarrhœa, with cramps in the bowels, relief from pain followed at once."

The following are the most prominent symptoms indicating the use of Iris, as observed by Dr. Packard: "Diarrhœa, with pain in the bowels, with or without vomiting; cramps in the bowels. Sick headache is relieved by the third dil.; in other cases, he used the tincture.

T. S. SCALES, M.D., of Woburn, Mass., reports: "I have found the Iris useful in cases characterized by pain in the region of the umbilicus, aggravated by motion, with diarrhœa threatening or actually existing, and in general headache (worse in anterior half) in individuals subject to headache; most of these

cases were accompanied by nausea and vomiting; they were epidemic in 1866. Used the first dec. dil.; two drops every half hour at first, then every hour, and, at last, every two hours, till cured; the cases terminated in from three to twenty-four hours.

J. P. PAINE, M.D., of Roxbury, Mass., reports: "Have given Iris in cases of morning sickness in pregnancy. In a case of miscarriage, the following symptoms were promptly relieved by Iris: Inflammation and soreness of the uterus; very sensitive to the touch; pain across the umbilicus, with severe griping at short intervals; nausea and vomiting of green or yellow bile, with eructations of a great deal of flatus during and between the times of vomiting; diarrhœa of a yellow, bilious character."

SUMMARY.

ABBREVIATIONS OF THE NAMES OF PROVERS.

G. F. Butman, M.D.	B.
Wm. H. Burt, M.D.	Bt.
C. B. Fox	F.
S. Gregg, M.D.	G.
Mr. D. B. H.	Mr. H.
Mrs. D. B. H.	Mrs. H.
J. Hedenberg, M.D.	Hd.
Wm. H. Holcombe, M.D.	Hol.
F. H. Krebs, M.D.	K.
Mrs. N.	N.
L. D. Packard, M.D.	Pk.
J. P. Paine, M.D.	Pn.
J. G. Rowland, M.D.	R.
Miss S.	S.
T. S. Scales, M.D.	Sc.
A. F. Squier, M.D.	Sq.
C. Wesselhoeft, M. D.	C. W.

General Symptoms.*

1 Worn out by fatigue and suffering. Hol.

Great exhaustion; swollen eyes (in consequence of excessive watery, bloody or mucous discharges). Bt.

Kicks and scratches at a fearful rate, (after spasms and paralytic symptoms). Cat.

Ears and legs cold; mews fearfully by spells as if suffering great pain. Cat.

5 Crawled a short distance, went into spasms, lasting for one minute; spasms were in the fore legs and back; respiration diminished; pupils dilated. Cat.

If spoken to, mews fearfully but cannot get up. Cat.

Walked two feet; staggered very much; dropped on its side; respiration forty-eight. Cat.

Lies in same position for some time, mewing at every breath; mouth filled with froth. Cat.

Tensive, momentary, and recurring pains,—in all the joints, but mostly the smaller,—which shift rapidly about; mostly in the evening. R.

Skin.

10 Vertex and sides of head covered with a thick crust from the exudation of lymph; under the scab it looks red, and bleeds if incrustation is disturbed. Bt.

Top of head has twenty-six pustules on it, some of them as large as a three-cent piece, situated on an inflamed base of a rose-color, with red streaks running from one to the other; they contain matter; very tender to the touch; lasting four days. ° Bt.

Upper lip, orifices of nose, lower part of face covered with herpes pustulosus, secreting offensive, contagious matter. Garnsey.

---

* Symptoms marked ° were caused by iridin.

Several small vesicles on right wrist, gradually forming into pustules, having a depression in the centre, drying into crusts, which remained for nine days. R.

Pimple on left middle finger; the next day inflammation extended over the hand; the next day it became more violent and very painful. It was afterwards opened to obtain relief; no pus was found, but it was subsequently formed, and discharged through the opening, which penetrated as far as the bone; pain extended up the arm, with much swelling in the affected part, having the appearance of a malignant boil. There was a similar formation on the index finger, but it subsided after a time. R.

15 Several pimples on lower extremities and other parts of the body, like mosquito-bites. R.

Boils on back, face, and hands. R.

SLEEP.

Restless at night, with troubled dreams.

Restlessness for five nights in succession. R.

Unusual restlessness during night, sleep disturbed by starting. R.

20 Sleep, very restless all night, with bad dreams. Bt.

Dreams of dissecting a woman hung up by her heels; tries to get up and shut the door, but cannot; real nightmare. ° Bt.

Dreams of suffocation and fire.

Dreams of fighting.

Feeling of drowsiness; sleepiness with chills. R.

25 Starting during sleep. R.

Dreams of digging up dead people, of falling into a grave, and awakes much frightened. ° Bt.

Horrid dreams. ° Bt.

Dreams of snakes and everything bad. ° Bt.

Amorous dreams with nocturnal emissions. Bt.

30 Great desire to sleep in the daytime; fell asleep while reading. °Bt.

Woke up unusually early, with dry mouth and great depression.

Awoke two hours earlier than usual, with no disposition to renew sleep. R.

Fever.

Sleepiness with great chilliness, only comfortable near a hot fire; and even then cold, chilly sensations down the back. R.

Feeling as if having taken cold, with lameness of trunk and lumbar region. W.

35 Feverish, with pains in the abdomen. R.

Languid and feverish in the afternoon; no inclination to mental or physical exercise.

Great chilliness over whole body at night, though abundantly covered.

Pulse somewhat accelerated.

Pulse accelerated. B.

40 Flushed face, fever, drowsiness and loss of appetite, weakness, languor and rumbling in the bowels; followed, next day, by thin watery diarrhœa, lasting all day.

Heat over the whole body, then chilliness with cold hands and feet. R.

Hands hot and dry all day. °Bt.

Head full and hot, face flushed.

Sweat over whole body, particularly in groin, also cutting pain in the urethra; dry cracked lips. R.

45 Typhoid fever with muttering delirium; yellow, watery fetid diarrhœa; involuntary passage of water and fæces; tongue dry, brown and crusty, edges red; sordes on gums and teeth; foul breath. Kitchen.

Fever with stupor, black, fetid involuntary diarrhœa;

tongue dry and brown: fetid breath; or, fever with intense headache; pain in small of back; black dysenteric discharges; nausea and efforts to vomit. Kitchen.

Mind and Disposition.

Weakness of memory. H.

Dullness of mental faculties and special senses, with pain in right temple. Sq.

Inability to fix the mind on studies. °Bt.

50 Nervous fretfulness all day. H.

Disposition to feel displeased with everything and everybody, which gives place to a feeling of liveliness and activity (immediate.) R.

General languor, ill humor; inability to fix the mind on any subject; when writing, the mind will wander to other things. R.

Irritable through the day. Bt.

Vexed and irritable mood; disposition to find fault. R.

55 Weakness, despondency, thinks he is going to be very sick; then a disposition to laugh at his fears; which, however, soon return. R.

Very restless; thinks he cannot live; very much frightened. Bt.

Head.

Headache, with great depression of spirits, and debility.

Headache, with pain in the bowels.

Headache much aggravated by coughing.

60 Head full and hot; face flushed. R.

Head feels heavy, eyes dull, with pain over left superciliary ridge. R.

Sleepy dullness and dizziness of head. B.

Dull, heavy headache; much pain in forehead and temples, coming on every few minutes. °Bt.

Slight dull pain in posterior fontanelle. B.

65 Slight pain in right temple. Sq.

Dull heavy headache in forehead. Bt.

Nausea, with slight momentary dullness of head (resembling vertigo). Sq.

Dullness of head (mental faculties and special senses). Sq.

Dizziness (immediately after medicine). N.

70 Sleepy dullness and dizziness of head; nausea; belching of a large quantity of wind. B.

Giddiness, — suddenly, while walking in-doors, — followed by lightness of the head. Mrs. H.

Dizziness with pressure in forehead (immediate), with pressure outward in the ears. C. W.

Nausea and headache, (in five minutes). B.

Pain in forehead and left temple. °Bt.

75 Slight pain in forehead, changing from side to side. S.

Severe frontal headache, — worse in the evening, and increased by violent motion, better in the open air, which speedily relieves. C. W.

Tightness across forehead. H.

In the evening, frontal headache with dizziness occasionally. N.

Acute pains in the head, as if pressing from within upwards; felt chiefly in forehead and vertex, after having been in the cold air, and during quick motions (soon after medicine.) W.

80 Sensation of band around the forehead while laughing. B.

Slight pain in forehead, and much in posterior fontanelle. B.

For two weeks, occasionally severe shooting pains pass through temples several times a day. Bt.

Periodical sick-headache, in head, temples and eyes; dis-

tressing vomiting of sweetish mucus, and traces of bile when there is severe straining. Kitchen.

Sharp pains in temples. °Bt.

85 Slight dull pain in right temple, passing over top of head, behind left ear. Sq.

Dull pain in right parietal protuberance, which increases until it becomes a hammering pain, increased by motion so as to be intolerable, but gradually abating during continued motion, returning again when at rest. R.

Acute boring pain in right parietal protuberance, causing him to bend down his head.

Headache for two days; the third day, a pain shooting like an electric shock from right temple to left part of occiput.

Stitch in inferior part of occiput, worse on the right than on the left side.

90 Tight constrictive feeling of scalp. °Bt.

Eyes.

Burning pain in the internal canthus of right eye, the eye filling with tears.

Eyes feel dull, with pain over left superciliary ridge.

Eyes swollen, with blue circles around them.

Redness of conjunctiva, as if from cold. R.

95 Eyes swollen, in consequence of watery, bloody, or mucous discharge (with great prostration). Bt.

Pupils dilated after death. Cat.

Inflamed eyelids during summer complaint. Kitchen.

Ears.

Singings and buzzing in the ears (in a lady, — after two grains of Iridin, given for bilious diarrhœa).

Nose.

Habitual nasal catarrh is very much aggravated. Sq.

100 Sneezing. R.

Face.

Awake with neuralgic pains in the right side of face, darting stitches in two carious teeth; pain affects especially the infra-orbital nerve. Hol.

Facial neuralgia, involving the supra- and infra-orbital, and superior maxillary and inferior dental nerves; began after breakfast with stupid and stunning headache (for two successive days). Hol.

Facial neuralgia, with violent headache, and general malaise. Hol.

Dull soreness where the neuralgia had been. Hol.

Teeth.

105 Toothache. F.

Swelling of gums, on inner surface of left lower jaw, under the molar teeth. R.

Teeth feel too long, and are very sore. Bt.

Dull, heavy, aching pain in posterior upper molars, which feel elongated and sore. °Bt.

Toothache in a warm room. R.

110 A defective, filled tooth is painful, and feels as if too long; very tender when biting upon it, with soreness and roughness of hard palate. W.

Mouth and Taste.

Mouth feels as if scalded, tongue thick and rough. Bt.

Dry cracked lips. R.

Cracked lips. F.

Soreness of roof of mouth, with roughness of hard palate; very painful on being touched with the tongue or solid food. W.

115 Profuse flow of saliva all day. Bt.

Constant discharge of ropy saliva during conversation. Bt.

Feeling of greasy coating over mouth and tongue early in the morning. R.

Tongue and gums greasy or slimy in the morning. F.

Tongue feels thick; flat taste in mouth. Bt.

120 Bad taste. F.

Back part of mouth and fauces felt as if on fire, with profuse flow of saliva. Bt.

Throat.

Throat, which is burning intensely, feels as if it were three times as large as usual, like a heated cavern. C. W.

Smarting, burning, scratching in soft palate, increasing to fiery heat; spreads over whole extent of fauces and down œsophagus, and up to nose. C. W.

Burning in fauces, as if from taking cayenne pepper, only in expiration (in fifteen minutes). Sq.

125 Many enlarged blood vessels, bright-red, on uvula, palate and fauces. C. W.

Sore throat, headache, and nausea.

Tonsils, uvula, and palate bright-red, with engorgement of larger vessels. Sq.

Sore throat, with irritation of larynx in the evening; dryness and burning along edge of soft palate at night; tonsils swollen and painful on swallowing. C. W.

Burning in fauces in five minutes, extending slightly to tip of tongue; slight in inspiration, severe in expiration. Sq.

130 Burning extends down œsophagus to pit of stomach, with nausea. Sq.

Slight burning in back of mouth, fauces, palate, and course of œsophagus. Sq.

Burning extends down œsophagus to stomach, with nausea. B.

Heat, smarting, and burning in palate and fauces, with difficult but painless deglutition. W.

Burning in throat, palate, and tonsils; increased by expiration, diminished by inspiration. B.

135 Frequent spasms of pharynx while eating, with inability to swallow; food lodges in the throat, with choking and gagging. C. W.

Difficult deglutition while eating, (after eight hours). The food sticks in pharynx, requiring several efforts to swallow it. W.

Frequent and painful hawking (screatus) of a tough mucus from larynx. Hol.

Very hoarse. Bt.

Rough throat, and running saliva. F.

140 The throat symptoms are increased very much during expiration; diminished very much during inspiration. B.

Stomach.

Slight nausea. Sq.

Nausea with headache. B.

Slight nausea, with empty eructation, (after ten minutes). Sq.

Nausea and faintness in the evening. C. W.

145 Nausea in the evening, obliging him to lie down.

Constant eructation of tasteless gas. Bt.

Frequent empty eructations. (Tinct.). C. W.

Fullness of stomach, followed by eructations, giving relief. B.

Nausea, with eructation of much wind. B.

150 Heartburn several times in the day; a hot cramp-like sensation rises upwards from the stomach. (Tinct.) W.

Food rises, very sour, (during watery stools, tenesmus, colic, etc.).

Stomach very sour; bowels tender on pressure. Bt.

Nausea and slight vomiting of watery and extremely sour fluid. R.

Slight twisting pain in the stomach. C. W.

155 Twitching in pit of stomach. C. W.

Awful burning distress, deep in the region of pancreas, — unrelieved by cold water, — all the afternoon and evening.

Great burning distress in epigastric region, not relieved by cold water. Bt.

Aching pain in stomach, after drinking cold water. R.

No appetite for dinner. Hol.

160 No appetite, loss of taste, with thin, watery stools and rumbling in bowels. Bt.

Stomach almost ready to burst with gas (post mortem). Cat.

Pancreas red with blood; more congested than any other organ. Cat.

Nausea, vomiting of frothy mucus; staring, as if frightened; constant nausea; very restless; crying fearfully; respiration rapid; saliva runs from its mouth constantly. Desperate, ineffectual efforts to vomit. Throws its head up, and mews fearfully; mouth wide open; head falls on the floor: death. Cat.

Stomach much distended with gas, with a quantity of meat undigested; pyloric extremity covered with bile; duodenum covered with bile and watery mucus. Cat.

165 Vomiting (during ague) yellow; it poured forth in a stream as from a hose-pipe. Garnsey.

Vomiting of food, or of sour bilious matter, with

violent pains in epigastric region, coming at intervals. Kitchen.

Abdomen.

Slight pain in bowels, with heat and soreness, as after a cold, and with premonitions of diarrhœa. N.

Rumbling in lower part of abdomen, and uneasy feeling in pit of stomach, increasing till lower part of sternum seemed protruding. R.

Pain in left side, as though the ribs were pressing hard upon the lung. Unable to take a long breath for pain in the left lung, which was of sticking and cutting character.

170 Dull aching pain in right hypochondrium when walking. R.

Feeling of nausea in abdomen like the beginning of sea-sickness; a faintness as if intestines were being revolved in wrong direction (immediate). W.

In the afternoon, severe colic, first in the right then in the left flank, with urging to stool. Hol.

Colicky pains during the evening and night, obliging him to bend forward for relief; with loss of appetite and great restlessness during the night (relieved by Nux vom.).

Colic in epigastric and umbilical region, followed by watery stools, with rumbling in the bowels; faintness, trembling of knees. Bt.

175 Pain in bowels, going off by discharge of flatus. R.

Swelling of stomach and abdomen. Kitchen.

Sharp griping pain in bowels; nausea and eructation of wind. B.

Sharp neuralgic pain in bowels. B.

Cramp in left side, cutting, followed by darting pains in the bowels. Mrs. H.

180 Cramp in left side under the ribs. H.

Flying pains all through the bowels. Bt.

Liver much congested, of black color, bleeds profusely when cut into. Gall bladder half full of bile; pancreas very pale. Cat.

The whole of the intestines filled with mucus, water, and gas; no bile to be seen. Cat.

Subacute colic in spring and autumn; colic of infants. Kitchen.

Stool and Anus.

185 Constipation for several days.

Stools costive. C. W.

No stools for two days. W.

Sudden diarrhœic stool after supper. R.

Flatulence and looseness of bowels. F.

190 In the afternoon, a good deal of fetid flatulence. Hol.

Thin watery discharge from bowels. Bt.

Periodical night diarrhœa, and cholera infantum. Kitchen.

Awaking with great rumbling and distress in abdomen and with great desire for stool, followed immediately by a copious, thin, watery stool, which could not be retained a moment without pain. Bt.

Watery discharge tinged with bile, running from bowels, in a continuous stream, discharging nearly two quarts, followed by relief. Bt.

195 Watery stool followed by straining, with passage of blood and mucus. Bt.

A watery discharge before death. Cat.

Large, yellow, papescent stool without pain, followed by watery stool, while the burning in the pancreas is fearful to endure. Bt.

Soft, papescent stools without pain, but rumbling in the bowels. °Bt.

Stool lumpy, brown and very offensive; sweat over whole body, particularly in the groin. R.

200 Two greenish black stools, with burning at the anus, preceded by fetid flatulence in the afternoon. Hol.

Violent call to a second stool by a sensation as if wind were forcibly distending the rectum; no wind was discharged, but relief followed the discharge of a little greenish black matter, attended with severe burning at the anus. Hol.

Natural stools; anus feels sore, or as if sharp points were sticking in the parts. Bt.

Six dysenteric stools during the night, with pain and rumbling in hypogastrium; also great lassitude. R.

Tenesmus, with passage of a little mucus. Bt.

205 Anus feels on fire after watery stool, with straining and bearing down. Bt.

Constant distress in anus, as if prolapsed. Bt.

Disposition to stool, with burning at the anus. Hol.

Prolapse of mucous membrane, with great smarting pain. Bt.

Anus feels prolapsed and painful. Bt.

210 No constipation followed the protracted diarrhœa. Bt.

Urinary Organs.

Urine very scanty and burning, when voided (during or after copious water discharges from bowels). Bt.

Urine scanty and red, and burning the whole length of urethra for half an hour after voiding it. Bt.

Urine scanty and of strong uric acid odor; very dark and thick in the morning; it passes without force and with some straining, but without pain. C. W.

Urine became less frequent and quite high-colored. Hol.

215 Very frequent and copious discharges of perfectly limpid urine. Hol.

Urine increased in quantity. R.

Urine copious, of a strong, disagreeable odor.

Cutting and sticking pains in urethra when making water, with coldness and itching over genitals; the itching being worse on scratching. R.

Sharp cutting pain in the urethra when commencing to urinate. R.

Male Genitals.

220 Discharge of semen with amorous dreams. Bt.

Restless nights, with discharge of semen and amorous dreams for several nights. °Bt.

Inflammation of glans penis; it is much swollen and red. Bt.

Seminal emissions with amorous dreams, twice a week, followed by prostration, nervousness, and great anxiety. O. H. Moon.

Female Genitals.

Menses (always regular and profuse) appear three days after time, and scanty. N.

225 Effectual in hemorrhages, particularly in menorrhagia. New Remedies.

Air-passages and Chest.

In the morning, soreness of chest across from nipple to nipple, with a tender, painful spot on right border of sternum, painful on inspiration. C. W.

Pain in left side of chest. R.

Soreness of the chest and throat; often lameness of arms and back. N.

Hoarseness and ringing in the ears. Bt.

230 Rattling of loose phlegm, low in the windpipe. C. W.

Catarrhal mucus in a lump rattles up and down the

windpipe; at lengh it is expectorated with a sweetish, offensive taste. C. W.

Awakes at night with severe tickling under top of sternum, with cough; dry and distressing, because nothing can be raised, nor the tickling reached. C. W.

Obstruction and catarrhal soreness of air-passages; frequent hawking. C. W.

Short, dry cough from tickling in larynx; pain in left side as if ribs were pressing against the lungs. Unable to take a long breath for pain in the left chest, of cutting, sticking character. R.

235 Cough, with soreness in trachea, also tickling. C. W.

Slight, hacking cough in the morning, without expectoration, with soreness in larynx anteriorly. W.

Inflammation of windpipe, with hard cough, tickling in larynx, and rattling in lower part of lungs. Sq.

Increased action of heart in force and frequency; pulse 89 (normal, 72). B.

Gasping for breath, with respiration lessened in frequency. Cat.

240 Gasps and mews at every breath. Cat.

Respiration very rapid; mews constantly; appears to be in great pain; rolls from side to side, mouth wide open; great difficulty of breathing; appears to be dying. Cat.

Lungs much congested; the upper lobes filled with dark, venous blood; heart filled with black blood. Cat.

Action of heart increased in force and frequency. B.

Trunk, Back, and Loins.

Stiffness of trapezius muscle causes constant dragging of shoulders, and desire to twist the head from side to side all the forenoon. N.

245 Stiffness in trapezius muscle. C. W.

Lameness of arms, extended to shoulders and back of the neck, like rheumatism after taking cold. N.

Pains tensive and sticking in right shoulder during motion, particularly on raising the arm (for six weeks after discontinuing the medicine). R.

Rheumatic pain of right shoulder, worse on motion, especially on raising the arm. R.

Considerable stiffness of latissimus dorsi muscle of right side on moving, but not sore to the touch. C. W.

250 On rising from the chair, a very painful tearing in lumbar region, making it impossible to straighten the body for some moments. C. W.

Dull, heavy pain in lumbar region, also aggravated by motion, especially walking; urine scanty and high-colored. °Bt.

Stiffness of loins and back all the morning. C. W.

Pain in small of back all day, while sewing. S.

Severe back ache. Bt.

255 Weakness and weariness in lower part of back. R.

Crampy pain in right lumbar region, in the evening, for several hours, causing sweat to break out.

Pain along posterior part of crista ilii of right side. R.

Upper Extremities.

Neuralgic pains like severe constriction around left arm, forearm, and thigh. C. W.

Severe rheumatic pains in whole right arm and right knee-joint, worse on motion, and continuing when at rest.

260 Lameness of arms between elbow and shoulder, as after severe exercise; also, sore to the touch. N.

Heaviness in hands and elbows, with pain in the back between the shoulders. S.

Sharp, tearing pain in right shoulder, worse on motion, especially on raising the arm, most in the evening. R.

Pains in metacarpal joints of both hands, muscles of right arm, and pectoralis major muscle, mostly during motion, and in the evening. R.

Hands hot and dry. Bt.

265 In writing, pains in phalanges of right hand, and in end of index finger of same hand (after several weeks). R.

Pain in right arm, between elbow and shoulder; while the backache disappears. S.

Pain in the fingers. F.

Pain in last joint of middle finger of left hand. R.

Sharp, sticking pains in the middle fingers of right hand; sharp pains in middle fingers of left hand, succeeded instantly by similar pain in axilla of same side. R.

270 Shooting, shifting, momentary pains in phalangeal and metacarpo-phalangeal articulations; more during evening; and on motion. R.

Sharp, cutting pain, frequent in metacarpo-phalangeal articulation of right thumb. R.

Lower Extremities.

Pain shooting from behind large trochanter down posterior part of left thigh into the foot, on every motion, particularly while walking; from nine, A.M., till four, P.M. C. W.

Sciatic twinges, on bending the body while sitting. C. W.

Twinging, shooting pains in the course of left sciatic nerve; could not walk without limping. C. W.

275 Marked sciatica of left side for several days; violent exertion does not increase the pain more than moderate motion. C. W.

Sciatic pains, as if left hip-joint were wrenched, or forced to remain long in an awkward position, several times in the day. C. W.

In the evening, painful drawing and lameness behind left trochanter, extending down to popliteal space. C. W.

Sciatic twinges in hip-joint; pain as if wrenched, followed by burning pain. C. W.

Sudden rheumatic lameness of posterior femoral region, while exercising in the morning, causing limping (after twenty-two hours). C. W.

280 Pain in left hip-joint when walking. R.

Violent tearing pain in right hip-joint and knee, and both shoulders. R.

Pain in left thigh; shooting and sticking pain in right foot. R.

Pain in the right, then left knee, while walking. R.

Trembling and weakness of the knees. Bt.

285 Calves of legs pain very much, when walking, — especially the right. Bt.

Sharp pain in first joint of great toe of right foot, when walking. R.

287 Paralysis of hinder extremities, and spasms in the forelegs of cats. Bt.

SYNOPSIS OF GENERAL CHARACTERISTICS.

The character of pain produced by Iris versicolor is acute, boring, hammering, shooting, or sticking (head); neuralgic pains of a darting or sore, tearing, and cramp-like kind (face and extremities); burning, smarting, and scratching (mucous surfaces); pressing, aching, and cramp-like (intestines); spasms (pharynx, also superior extremities); rheumatic pains of various parts, apparently not so much of the joints as of the muscles and nerves. It produced paralysis of the posterior extremities of a cat. The left side of the body is affected more frequently than the right; and the pains move from right to left, in many instances when the parts of the right side are affected. Aggravations occur in the afternoon, evening, and night, on motion,

especially while walking; in throat and air-passages, on coughing and on expiration. Many pains occur periodically, or in frequently-repeated paroxysms. Dr. Kitchen regards it as particularly efficacious in abdominal complaints of children, occurring in spring and autumn.

VII.

PTELEA TRIFOLIATA.

BY E. M. HALE, M.D., OF CHICAGO.

THE Ptelea trifoliata of *Linnæus*, is a shrub or small tree of the natural order Rutaceæ; or, according to earlier views, of an order Xanthoxylaceæ, or, still earlier, of the artificial class Monœcia and order Tetra-pentandria, of the Sexual System of Linnæus.

It is figured as follows:—

Miller, Icones, t. 211;

Gærtner, de Fructibus et Seminibus, pl. 49;

Schkuhr, Botanisches Handbuch, pl. 25;

Guimpel, Fremden Holzarten, pl. 74;

La Marck, Planches de Botanique de l'Encyclopédie, pl. 84;

Duhamel, Arbres et Arbustes en Pleine Terre, 2*d ed.*, vol. 1, pl. 57;

Dictionnaire des Sciences Naturelles, pl. 128;

Mémoires du Muséum d'Histoire Naturelle, vol. 12, pl. 26;

Gray, Genera Illustrata, pl. 157;

Dillenius, Horti Elthamensis Plant. Rar., pl. 122;

Payer, Organogénie, pl. 24;

Agardh, Theoria Systematis Plantarum, pl. 19;

Loudon, Arboretum Britannicum, vol. 5, pl. 59.

The Xanthoxylaceæ included those Rutaceæ which have unisexual flowers. The genus Ptelea has polygamous flowers, with four or five stamens, with samaroid, two-celled fruit, but one-

celled by abortion. Its name is the Greek for Elm, given because of the resemblance of the samaroid fruits.

Its six known species are all North-American. Three are Mexican, — P. pentandra, P. podocarpa, and P. angustifolia. P. mollis, of the Carolinas, is clothed with a silky pubesence. P. Baldwinii, of East Florida, has minute leaves with obtuse leaflets.

The remaining species, Ptelea trifoliata, Three-leaved Ptelea, Hop-tree, Wing-seed, Wafer-ash (known in Britain as Shrubby trefoil and Tree trefoil, in France as Orme de Samarie à trois feuilles, and in Germany as Dreiblättrige Lederblume), is indigenous throughout the United States, from the East to beyond the Mississippi, and even to Texas, in moist, shady places, and on the borders of woods and among rocks. It is a tall shrub, but under cultivation at Gordon Castle, Bannfshire, Scotland, it had, in 1835, reached the height of forty-five feet, with a trunk fifteen inches in diameter, and with branches extending twenty-seven feet from side to side.

Two varieties have been found, — one with five leaflets (P. pentaphylla, *Moench*); the other with the branches, petioles, and under surface of the leaves clothed with a soft tomentose pubescence, even when old (P. pubescens, *Pursh*).

It was originally sent to England by Bannister, but, being lost, was re-introduced by Catesby in 1724, from Carolina. It is common in the gardens of Europe; and in the Jardin des Plantes, at Paris, a tree may be seen, the crown of which had, in sixty years from planting, attained a diameter of forty-five feet.

[To this same Rue family belong the Xanthoxylum Americanum, Northern Prickly-ash, and X. Carolinianum, the Prickly-ash of the South. And in some respects they are medicinal as well as botanical analogues of the Ptelea.]

Pharmaceutical History. — The bark of the root is the officinal portion. It yields its properties to boiling water, but alco-

hol is the best solvent. It is, when dried, of a light brownish-yellow color externally, in cylindrical rolls or quills, a line or two in thickness, and from one to several inches in length, irregularly wrinkled and furrowed externally, with broad transverse lines or rings at short but irregular intervals, and covered with a thin epidermis; internally it is yellowish-white, but becomes darker on exposure, and is wrinkled longitudinally. It is brittle, with an almost smooth resinous fracture, granular under the microscope, resembling wax. It has a peculiar smell, which some describe as like that of liquorice root; but to me the bark, and especially the tincture, strongly resembles in odor that of the boiling linseed oil used in the manufacture of white paint. The taste is peculiar, almost indescribable: bitter, resinous, pungent, acrid, very disagreeable, speedily and powerfully acting on the mouth and fauces; and its pungency is persistent, owing probably to the oil.

The *tincture* of the bark should be made with the strongest alcohol: the addition of a small quantity of water causes it to turn as milky as the balsam of Copaiva under similar circumstances.

A *tincture trituration* may be made from the mother-tincture, and is a very eligible preparation.

The flowers, fruit, leaves, and bark of the branches, all possess the same medicinal qualities as the root, but in a less degree. I have used the tincture of the hardly-ripe fruit. The woody portion of the shrub is but feebly medicinal. Ptelein, or the active principle, may be used in tincture, as it is perfectly soluble in alcohol; but the triturations are preferable. (See Chemical History.)

I do not know that for medicinal preparations the fresh bark possesses any superiority over the dried. The bark should be gathered in the fall, — at the time of its greatest strength, — after its constituent qualities have been fully elaborated in its cells. The leaves should be used when fully developed, but before the

ripening; the flowers, just before the petals drop; and the fruits, just at the period of ripening.

The process of drying these portions should be conducted in a warm, shaded place, with care that they do not become moldy, or infested by insects of any kind.

CHEMICAL HISTORY.—An oleo-resin, improperly called Ptelein, is considered the active principle of the Ptelea. It is described as of the consistence of thick syrup or molasses, dark-brown in mass, much lighter when in thin layers, and having a peculiar odor, somewhat similar to that of the extract of liquorice, and an oily, bitterish, acrid, persistent taste, peculiar and rather disagreeable, and acting powerfully on the fauces. It is soluble in alcohol, ether, oil of turpentine, and rather imperfectly in alkaline solutions; insoluble in acids and water. It imparts a slight milky color to water, and separates into two portions, one of which floats on the water, while the other sinks. Acetic acid added to the alcoholic or ethereal solutions does not disturb them unless added in excess. Water added to the alcoholic solution produces a milky color, precipitating the resin; added to the ethereal solution, it separates the oil, which floats on the surface. The bark was not subjected to a chemical analysis until 1862, when Geo. M. Smyser, of Philadelphia, presented an Inaugural Essay to the Philadelphia College of Pharmacy, having for its subject Ptelea trifoliata. The following were the experiments: —

"*First.* A cold infusion was prepared by percolating six drachms of the powdered leaves with water, until six ounces of liquid had passed. This was of a dark-brown color, had a bitter, aromatic taste, and an odor strongly resembling that of hops. To a portion of this infusion a solution of bichloride of mercury was added, which produced a dirty-white precipitate. And, with successive portions of the infusion, sulphuric and muriatic acids produced each a precipitate. The infusion was also coagulated by heat, showing the presence of vegetable albumen.

To a portion of the infusion a few drops of tincture of chloride of iron was added, which produced a black color. To different portions were added nitrate of silver, sulphate of copper, and a solution of gelatine, all of which produced precipitates, indicating the presence of tannic acid. The portion which was precipitated by gelatine was filtered; and, with the filtered liquid, tincture of chloride of iron produced a greenish-black color, which disappeared when the liquid was heated, showing the presence of gallic acid.

"*Second.* An infusion of the fruit was prepared, similar to that from the leaves. This infusion had a very bitter taste, and, upon treating it as in the former experiments, the result was the same.

"*Third.* Two and a half ounces of the powdered fruit was treated with ether,—to deprive it of fixed oil,—dried and treated with alcohol. To the resulting tincture, acetate of lead was added, which threw down a large quantity of coloring matter and some resin: the liquid was filtered, and treated by passing sulphureted hydrogen through it to get rid of the excess of lead, and then again filtered and heated to drive off the excess of sulphureted hydrogen. To the liquid, yet warm, water was added in drops until it began to produce a precipitate. It was then placed on a sand-bath, and evaporated to a syrupy consistence: when it had cooled, it was agitated with an equal bulk of chloroform; and, when allowed to rest a few minutes, it separated into two layers, the watery liquid being on the top; this was decanted, and on evaporation yielded a small quantity of an extract of a very bitter taste. I made repeated attempts to obtain crystals from this extract, but without success. The chloroformic solution, when evaporated, gave a soft, resinous substance of a slightly acrid, bitter taste.

"*Fourth.* Three ounces of the powdered fruit was moistened with equal parts of alcohol and water, placed in a percolator, and the menstruum of alcohol and water passed through it until

it was exhausted. The resulting tincture was evaporated to an extract, which was of a dark-brown color and a bitter, acrid taste. One drachm of this extract was washed with alcohol, which dissolved out a small quantity of a soft resin, which was very acrid to the taste. The same part of the extract was washed with ether; this dissolved a portion of it, and on evaporation yielded a brittle resin, which was odorless and almost tasteless. The part which remained after being washed with the alcohol and ether was principally bitter, extractive matter, and which had none of the acrimony of the extract."

MEDICAL HISTORY. — The first mention of the Ptelea in the medical literature of this country is found in Rafinesque's Medical Botany. He observes that "the leaves are vulnerary, used for poultices, good for worms." In Louisiana "it is called Boispuant." He makes no mention of the bark of the root. It is mentioned in Griffith's Medical Botany: "The native species P. trifoliata. is said by Schœpf to be anthelmintic, for which purpose the leaves and young shoots are used in strong infusion. The fruit is aromatic and bitter, and is stated to be a good substitute for hops."

In Howard's Botanic Medicine, 1836, it is described under the vulgar names of Heal-all, Ague-bark, Pickaway, Anise, and Wing-seed. "The bark of the root is an excellent stimulant, expectorant, tonic; useful in all cases of debility, and particularly in agues. It has been highly extolled as a remedy in consumption of the lungs, having been sold as a nostrum at a high price. In this instance it was tinctured in whiskey."

In Dr. J. G. Jones's Eclectic Practice (first edition), it was erroneously mentioned under the name of Staphylea trifolia, the name of another shrub in no way resembling it. In the second edition it was properly designated as Ptelea trifoliata, and extolled as "a pure, unirritating tonic, having rather a soothing influence when applied to irritated mucous membranes." He advises it "in the convalescence after fevers, and in debility con-

nected with gastro-enteritic irritation. It promotes the appetite, enables the stomach to endure suitable nourishment, favors the early re-establishment of digestion, and will be tolerated by the stomach when other tonics are rejected." He prescribes the cold infusion, half a fluidounce every two or four hours.

In the various eclectic medical journals have appeared, from time to time, short articles alluding to its powers as a tonic. (See Eclectic Med. Jour., Cincinnati, 1867, p. 159.) King's Dispensatory describes it, and, in addition to the above medicinal uses, says: "A tincture made of Ptelea in whiskey is reputed to have cured several cases of asthma, and it is said to *cause, in many instances where it has been used, a troublesome, external erysipelatous inflammation, either general or local, but which, if the use of the tincture be persisted in, finally disappears, and the patient becomes at the same time cured of the disease for which he was treated.*"

Jones and Scudder, in their Eclectic Materia Medica (1858), add: "We have found a saturated solution of it beneficial in chronic rheumatism." They assert it to be "alterative, tonic, stomachic, diaphoretic, excitant," etc. Scudder has "known it to be employed in epilepsy with decided advantage."

Dr. Kost (Mat. Med., p. 631) has an article on Ptelea.

These crude uses and unscientific recommendations comprise all that can be gleaned from eclectic sources up to this time.

It has formed the basis of many nostrums, "ague-cures," "tonics," and even "expectorants." In 1866, Mr. Chapman, of Hudson, Michigan, manufactured a preparation of "Pepsin and Wafer-ash," in which the pepsin was united with the tincture of Ptelea, pure anhydrous glycerine being used as the menstruum. This preparation is very extensively used by some physicians as a chemico-dynamic remedy in dyspepsia, and very highly valued for its curative virtues. In my own practice, and under my observation, cases of atonic dyspepsia, with deficiency of gastric juice, have been cured by this preparation, when the usual rem-

edies failed to effect any improvement. A notable symptom in all these cases was, profound depression of spirits.

The first homœopathic physician who used the Ptelea in any form was Dr. P. H. Hale. Guided by the pathogenetic symptom found in King's Dispensatory, he gave it in some obstinate cases of chronic erysipelatous disease; also in affections of the bronchia and stomach, arising from the metastasis of such eruptions. He made some notable cures with the lower dilutions. At the meeting of the Western Institute of Homœopathy, held at Indianapolis, in 1867, Dr. Hale reported some of these cases, but they have not yet been published. I have occasionally prescribed it for symptoms similar to those obtained in the provings, especially a variety of urticaria, in which the raised spots assumed the appearance of a bruise. In a few cases it appeared to relieve the pain and itching, and shorten the duration of the disease. I do not know of any other clinical experience in the homœopathic school.

Allopathic experience is very limited. The only report on its use is to be found in Tilden's Journal of Materia Medica, vol. 5, page 321, by Dr. O. F. Potter, of St. Louis, Mo.

History of the Provings.—In 1866, the American Institute of Homœopathy appointed me one of the Bureau of Materia Medica. I selected Ptelea as the subject of my report, and offered two prizes for the best two series of physiological provings, and one prize of $50 for the best pathological proving on animals, "to consist of all the symptoms observed during life, a record of the pathological or normal appearance of each organ after death, a microscopic examination of the diseased organ or tissue, and any abnormal tissue or product."

At the time of the annual meeting of the Institute, in 1867, I had received only four physiological provings. I did not, therefore, award any prizes, or send in any report to the Institute, except the request to be continued on the Bureau during the next year. In the course of the year 1868, I received seven

additional series of physiological provings, but no pathological experiment. I name the following provers in the order of the excellence of their experiments: —

1. Prof. T. Nichol, M.D., of Belleville, (First Prize).
2. Drs. Fish and Train (Second Prize).
3. Dr. Wm. H. Burt, of Lincoln, Ill.
4. Dr. Cowles, of Bloomington, Ill.
5. Dr. A. Cowperthwait, of Toulon, Ill.
6. Dr. C. H. Lutes, of Ligonier, Ind.
7. Dr. C. W. Pierce, of Ft. Smith, Ark.
8. Dr. A. V. Marshall, of West Cornwall, Vt.
9. Dr. E. Parsons, of Kewanee, Ill.
10. Dr. Hayward, of Romeo, Mich.
11. Dr. Hunter, of Bellefontaine, O.

Total, twenty-two provings.

PROVINGS BY PROF. THOMAS NICHOL, M.D.,

Prover, thirty-six years of age; strong and muscular; of sanguine temperament, with fair hair and gray eyes. Has been for a number of years accustomed to experiment with drugs, and is easily affected by them.

First Proving.

April 16, 1867. — Being in perfect health, took thirty drops of the strong tincture of Ptelea. In a few minutes, roughness of the fauces, with feeling as if vomiting would come on. At twenty minutes to nine, A.M., sudden and unexpected urging to stool. Stool at first of natural consistence, but towards the close thinner and diarrhœic, with slight tenesmus. Passage accompanied by sweat on the forehead and head. though the morning was cool. Half past nine, A.M. Slight but persistent nausea, not at all disagreeable, somewhat resembling the effect of a few inhalations of sulphuric ether. Pressive feeling at the base of the brain, with nausea, closely resembling the well-

known Ipecac symptom: "Headache, as if the hair and skull were bruised, penetrating through the bones down to the root of the tongue, with nausea." Flushes of heat, alternating with chilliness, all through the day. Pulse 88. The appetite good at dinner, but entirely absent at supper-time. At five, P.M., urging to stool, at an unusual time. Half past six, P.M., stool, with straining; the discharge thinner than usual. Slight, but persistent nausea from nine till eleven, P.M.

April 17, quarter past seven, A.M.—Thirty drops. Sleep during the preceding night restless; languid and unrefreshed on waking. Feverish heat, lasting all day, accompanied by pains in all the limbs, and nausea. Disinclination for mental exertion. Frontal headache all day, pressing from within outwards.

April 18, noon.—Forty drops; immediately followed by retching, with increase of the frontal headache. At quarter to one, P.M., piercing pain shooting through the temples, with increased headache and nausea. After dinner, increased nausea, with heat of skin and profuse perspiration on the forehead; pulse 96, small and hard. Half past one, P.M. Inclination to vomit gradually passing off. In the evening, amelioration of all the symptoms; though still languid and drowsy. Constipation; no morning stool as usual, but at seven, P.M., small, hard stool, after much straining. Sound sleep all night, but haunted by frightful dreams.

April 19.—The symptoms were an exact copy of those developed on the preceding day.

Four, P.M.—Forty drops. Resolved to let this dose act for twenty-four hours, and then go on with more frequent doses.

April 20.—Awakened at one, A.M., by a pressing pain in the stomach; a feeling as of a weight; worse on motion, and aggravated by pressure with the hands. Also a rising of bitter fluid, with a deathly nausea, confusion of the head, and sweat on the forehead. Thoughts chased each other through the mind, it seeming impossible to fix the attention upon any one object.

This attack, which resembled acute dyspepsia, lasted from one till five, A.M., followed by sleep until seven, A.M.; languid and tired on awaking. During the whole forenoon, sharp pains in the right hypochondriac region

Half past three, P.M.—Twenty drops in water. At four, P.M., had sour risings from the stomach; heat of skin; pulse 96, small and fluttering. Nausea all the afternoon and evening, with splitting headache, incapacitating for mental exertion.

April 21, half past ten, A.M.—Thirty drops. Extraordinary inclination to sleep. Bitter taste in the mouth; the tongue, which had hitherto been clean, was coated with a yellowish fur, and the nausea was persistent. No stool to-day (an unusual occurrence). Up to this date, the medicine had had no effect on the temper, but to-day it produced fretfulness and irritability without the slightest exciting cause. Sleepiness excessive; went to bed at eight, P.M. At a quarter past nine, was roused to go and see a patient, and on awaking was attacked with a kind of nightmare; quite conscious, but unable to stir on account of a pressing weight in the stomach and whole front of the trunk.

April 22.—On rising, giddiness, with piercing pain through the brain, accompanied by severe aching pain in the stomach.

Quarter past six, A.M. — Thirty drops. All day, from six, A.M., till three, P.M., urging to stool, with rumbling in the bowels.

Three, P.M. — Thirty drops. The sickness of the stomach less to-day.

April 23, half past seven, A.M. — Thirty drops. Hard and difficult stool, with smarting of the anus after the passage. Three, P.M. Tenderness of the splenic region, with soreness to the touch.

Four, P.M.— Thirty drops. Giddiness, with vertigo at five, P.M.; vertigo long-continued, and, after it, increase of abdominal tenderness.

April 24, seven, A.M. — Forty drops. The abdominal pain extending more toward the umbilical region, and worse on motion. On drawing a long breath, a sharp stitch proceeds

from the umbilicus, toward the back-bone, and the tenderness on pressure is increased. Half past eleven, A.M. Sharp, cutting pains through the front of the brain, alleviated by pressing it with the hands. Three, P.M. — Forty drops.

April 25. — Sleep last night restless and uneasy, awaking unrefreshed and languid. The abdomen much swollen, and tender over its whole extent, especially over the splenic region.

Six, A.M. — Forty drops. Nine, A.M. Hard and difficult stool.

Ten, A.M. — Forty drops. Persistent nausea and vomiting, with giddiness of the head, and a feeling as if unsteady in the legs. Unfit for mental exertion all day, and toward the afternoon had to give up exertion of every kind.

Five, P.M. — Forty drops, and again at ten.

April 26, half past six, A.M. — Fifty drops. The giddiness of head and reeling in walking much increased.

Three, P.M. — Fifty drops. Four, P.M. The pain in the splenic region much increased, and the swelling evidently greater. Constant feeling of weight in the hypochondria when walking: a dragging pain, which affects the right as well as the left side.

Six, P.M. — Fifty drops. Head confused and giddy when retiring to bed, at half past ten.

April 27. — Head weak and confused. Seven, A.M. — Fifty drops. Nine, A.M. Attacked with too much giddiness and vertigo to keep up. Nausea and vomiting soon followed, although no relief came after the vomiting; bitter taste in the mouth; tongue dry and coated brownish-yellow; splenic pain much aggravated. Hot and feverish all day.

I was obliged to discontinue the proving, as the effects were so severe. I have had attacks before, but nothing of such a bilious character. I insert the symptoms for the reasons given by Dr. Dudgeon, on page 209 of Lectures on the Theory and Practice of Homœopathy: "He (the prover) should be in a good state of health, — not necessarily absolutely healthy, for that is a rare property. He may possess what is called an

idiosyncrasy, a weak point, and yet be perfectly capable of physiological experimentation, and the symptoms developed in him by virtue of this idiosyncrasy may still be received as part of the action of the medicine; for what is this idiosyncrasy but a tendency to be acted on by a specific with more than usual severity? It is in fact only the predisposing cause heightened in sensitiveness; and for the action of the medicine, as well as of the morbific agent, a predisposing cause is always requisite."

SECOND PROVING.

Oct. 21, 1867, quarter to seven, A.M. — Ten drops of tincture. Half past seven, A.M. Slight nausea rising from the stomach upwards, accompanied by roughness of the back part of the tongue. A very mild nausea — by no means unpleasant — lasted during the whole forenoon.

Eleven, A.M. — Fifteen drops. At dinner the appetite not as good as usual, though, before beginning the proving, it had been keen. Throughout the course of the meal, the same faint nausea persisted. One, P.M. Aching pain at the base of the brain, though the intellectual powers were as active as usual. At four, P.M., ate a bunch of somewhat tart grapes, and all the symptoms disappeared; the nausea and headache were entirely removed in a few minutes.

Quarter past eight, P.M. — Twenty drops. At half past nine, nausea, with rumbling in the bowels, accompanied by discharge of flatus, with desire for stool. Nausea, and pressing pain in the forehead; the pain presses from within outwards. No passage from the bowels to day, — a very unusual occurrence. At eleven, P.M., went to bed. Nausea aggravated by lying down. Restless and tossing, and some difficulty in falling asleep.

Oct. 22. — The dreams during the night were so vivid and lifelike as to seem, on waking, as if he had been up all night. In the morning, weak and languid; hands and feet hot and feverish; pulse 72, weak and fluttering.

Half past six, A.M. — Twenty-five drops. At half past seven, ringing in the ears, with slight giddiness, the ringing lasting from two to three minutes, and returning for the same length of time half an hour later. Little appetite for breakfast; the bread seemed tasteless; no thirst. Quarter past nine, A.M. Transient giddiness, with heat of the head and face, especially on the forehead. Goes about his professional duties in a perfunctory manner, very unlike the fiery zeal with which he usually combats disease and his allopathic step-brethren. Heaviness in the occipital region, with gloomy feeling in the forehead. At dinner, all food seemed tasteless. Three, P.M. Faint feeling in the stomach, with sourish rising. The nausea is much worse on walking. At quarter to seven P.M., was weighing out a trituration, and the mental confusion was so great that he had some difficulty in telling what was the tenth part of 150 grains. Appetite, at ten, was indifferently good, but food was still tasteless. Singing increases the nausea, and aggravates the headache, causing shooting pains from within outwards. At quarter past eight, P.M., a squeezing pain in the epigastric region.

Half past nine, P.M. — Twenty-five drops. In bed, the griping pain in the epigastric region worse than during the day, and the abdomen swollen, but not painful. During the night, heavy sleep, with less vivid dreams than on the previous night. Frontal headache, so severe that he almost felt it during sleep; and, on waking at intervals during the night, noted that it was more intense than during the day.

Oct. 23. — The heavy, pressing, frontal headache still continues; the pain pressing from within outwards, aggravated by stooping. Less nausea; stomach now feels weak. Aching pains with occasional stitching in the region of the diaphragm.

Twenty minutes past seven, A.M. — Twenty-five drops. At Eight, A.M., regurgitation, tasting of the medicine, but with little

nausea. Temper as good as usual yesterday, but to-day was unusually annoyed by noise. Headache, a stunning, pressing pain in the frontal region, closely resembling a chronic headache, which he had had for many years, and which his master in the institutes of homœopathy, Dr. Constantine Hering cured with one prescription of Rhus toxicodendron. At dinner, a complete repugnance to animal food, although there was less nausea than on the preceding day. Unable to eat rich pudding, of which he is ordinarily fond. At two, P.M., head languid and heavy; unable to follow the train of thought when reading what is by no means difficult. Strong inclination to lie down and rest. At ten minutes past two, sour risings from the stomach, with feeling of weight and uneasiness in the stomach. Half past eight, P.M. His intellectual powers moved slowly and heavily, and had difficulty in recalling familiar things to mind. At ten minutes past nine, P.M., slight vertigo, with a choking feeling in the pharynx. Took no dose, at noon or night, to-day. All the afternoon, felt a curious *malaise*, which prevented him from doing business with alacrity. Attended to his duties as usual, but felt such an oppression and weakness at the stomach that he had no heart to work. Stools, to-day and yesterday, of usual consistence and slimy coating.

Oct. 24. — The sleep during the preceding night was heavy but restless, with fantastic dreams, — practising medicine among people of gigantic stature; suddenly the scene would change, and his patients were about the size of peas. When awake, during the night, felt that the weight at the stomach was much worse than during the day. Conscious of the stunning headache before he was awake. Extraordinary weakness of memory; was unable to recall the names of familiar people. Felt feverish, irritable, and intolerant of noise. At breakfast he ate some pudding; symptoms all aggravated at once, especially the heaviness at the stomach and the difficulty of concentrating thought. One, P.M. At dinner, complete disgust at animal

food, — unable to eat any, — and the appetite was very poor. Quarter past three, P.M. Eructations, tasting of rotten eggs. Dry heat over the whole body, especially in the palms of the hands; pulse 104, small and weak. Aching, pressive pain in the temples, aggravated by chewing. Aching pains in the back part of the thighs. At four, P.M., hard stool, with straining. Soon after, eructations, almost bringing on emesis. Half past four, P.M. Aching in the bowels while walking; on standing still; pain aggravated by a deep inspiration; severe prostration of mind. At ten, P.M., a sharp, cutting pain in the right hypochondriac region, aggravated by deep inspiration, sufficiently severe to prevent sleep.

Oct. 25. — Sleep heavy and dream-haunted. Quarter to seven, A.M — Five drops. Splitting headache, aggravated by stooping, moving the eyes, and by reading. Dull, heavy pain in the right hypochondriac region, apparently on the convex surface of the liver. No passage from the bowels. At dinner, ate roast beef and pudding. Pain and distress in the stomach soon after, with feeling as if a stone were there.

Five, P.M. — Ten drops. Throbbing pain in the epigastric region, aggravated by full and deep respiration. Urine is deeper in color, and scalds slightly during passage. Weakness of mind very marked. Sleep good.

Oct. 26. — Sleep was better last night; awoke with the usual morning headache, with weight at the stomach. Aching of all the limbs, especially of the flexor muscles. Half past seven, A.M. Fifteen drops. At quarter to twelve, A.M., griping pains, with rumbling in the right iliac fossa. The epigastric region is sore to the touch, and pressure aggravates the nausea. Two, P.M. Pain and soreness extending from the right to the left hypochondriac regions, but worse in the epigastric region; a feeling of weight, aggravated by standing erect or sitting erect, and relieved by stooping forward. Good appetite at dinner, but the usual aggravation followed. Urine was high-colored, — the

"yellowish-red" of Neubauer and Vogel. At supper, voracious appetite, followed by pain in the epigastric region; despondency. Slight swelling in the region of the liver.

Ten, P.M. — Twenty drops.

Oct. 27. — Sleep uneasy and unrefreshing, and with more annoying dreams than before. Awoke with dry heat over the whole body, especially on the face and hands. The tongue was coated yellow, and the papillæ were red and prominent. Bitter taste in the mouth, with dryness.

Quarter to nine. — Twenty drops. This morning the headache is so severe that mental exertion is a burden, and the pain is materially aggravated by any attempt at study. The face is yellowish, and the skin feels dry and harsh. The dry heat over the body continues, though the feet are cold. The appetite is now voracious; food has not its natural taste; and pain at the stomach follows every meal. The liver is perceptibly swollen, and sore on pressure, which causes a dull and aching pain.

Nov. 1. — Has taken none of the drug since Oct. 27. The effects mentioned in the proving have gradually declined. The only new phase consists in a number of thoracic symptoms, which have come on very gradually, and which now cause considerable pain. As the various gastric and hepatic symptoms declined, uneasiness and difficulty in breathing came on, with dull pain, especially in the right infra-clavicular region, accompanied by hacking cough without expectoration. This has come on very insidiously, and now the right lung is dull on percussion, especially in the right infra-clavicular region. On auscultating the region over the bifurcation of the trachea and the upper part of the sternum (with Cammann's stethoscope), the respiration was found to be tubular, the sound was higher in pitch than the normal vesicular sound, and more rapidly evolved. Expiration and inspiration were of equal length, with a slight interval between them. On making a full inspiration, sharp pains shot

from the sternum towards the nipples, especially that of the left side. Pressure on the intercostal spaces close to the sternum caused pain of a dull, aching nature. These thoracic symptoms were better in the house, and aggravated by exposure to the keen air.

Nov. 7. — The thoracic symptoms had gradually declined.

Third Proving.

November 29, 1867, half past seven, A.M. — Took twenty drops sixth dec. dil. Ate a light breakfast at a quarter to eight. Weight and fullness at the stomach in an hour afterwards, with dull headache, pressing from within outwards. The headache does not incapacitate for mental exertion, but causes a languor and indisposition to work. At twenty minutes past eleven, A.M., griping in the stomach, with sharp pain on slight pressure. At dinner appetite very poor, after driving in the cool air all the forenoon. Twenty minutes past two, P.M. Rumbling in the umbilical region, with swelling accompanied by slight vertigo, with sweat on the forehead. At three, P.M., eructations of a bitter taste, with slight nausea. Marked indisposition for mental work. Ten minutes past three. Straining at stool, with increase of the vertigo. Twenty-five minutes past three, P.M. Increase of the headache, with marked forgetfulness. In writing a letter, felt a curious and unusual disposition to hurry through with it as quickly as possible, hardly taking time to write the words. The headache and vertigo were aggravated by even a moderate warmth of the room; all the symptoms aggravated in a hot room, and ameliorated in the cool air.

Quarter to nine, P.M. Twenty drops. At nine, P.M., involuntary discharge of flatus, with urging to stool.

November 30. — Sleep unusually deep and heavy. Racking frontal headache on waking, aggravated by rolling the eyes upward. Weight in the stomach, with bloating of the abdomen.

Continued speaking, even for five minutes, causes stitching pains in the diaphragm.

Half past seven, A.M. — Twenty drops sixth decimal dilution. At quarter to eleven, A.M., the headache had been persistent; sharp pains shoot from the right to the left frontal region. At ten minutes before noon, eructations, with a bitter taste in the mouth, causing nausea and abortive attempts at vomiting. At dinner, marked repugnance to butter and fatty foods. A very moderate meal was followed in half an hour by a sensation of stuffing and fullness. Headache a little better before dinner; an hour and a half after, much worse, and aggravated by mental exertion. Stitching pains in the upper part of the posterior mediastinum, aggravated by deep breathing, and by the recumbent position; this is accompanied by soreness of the trapezius muscles. Forgetfulness is even more marked than yesterday. The headache worse. Half past three, P.M. An attack of vertigo, without any exciting cause, other than the Ptelea. Attack so violent as to compel discontinuance of writing and to bow the head on the hands, closing the eyes. The vertigo was preceded and accompanied by mild nausea, with slight griping pains in the stomach. During the attack the pains in the posterior mediastinum were aggravated. At seven, P.M., urging to stool, but it merely resulted in the difficult discharge of a few balls of hardened fæces. During the whole day, unusual indisposition to mental or physical exertion.

Half past nine, P.M. — Twenty drops.

Dec. 1.—Sleep broken and restless; and, at waking intervals, hardly able to determine whether sleeping or waking. Unpleasant dreams during the whole night. Awoke at seven, A.M., languid and unrefreshed.

Eight, A.M. — Twenty drops. At half past eight, dull aching pains in the left scapula, aggravated by the slight exertion of writing. Ten minutes to nine, A.M. Griping pain in the epigastrium, aggravated by speaking and by deep respi-

ration; pressure aggravates the pain, and causes nausea. *Malaise* of body and mind; desire to lie on the lounge, and "think of nothing at all." Drowsy and sleepy during the whole afternoon, with bitter taste in the mouth. At five, P.M., urging to stool; a continued pressure on the rectum, but on attempting to have passage it resulted in nothing.

Ten minutes to ten, P.M. — Twenty drops.

Dec. 2.—Sleep broken by dreams, at first of a frightful nature, but, towards morning, lascivious. Awoke languid and unrefreshed, and with the feeling of being mentally unequal to the business of the day.

Seven, A.M. — Twenty drops. After breakfast, ineffectual urging to stool, as on the previous day. Lassitude and weariness, with disposition to hurry. At three, P.M., feeling of weight, and dull pain in the right hypochondriac region, with qualmishness of the stomach. The feeling of pressure in the rectum lasted all day, and, at five, finally resulted in the discharge of a small quantity of indurated fæces, with only slight relief. There is, apparently, a true torpor of the rectum.

Nine, P.M. — Twenty drops.

Dec. 3. — Awoke at six, with a bruised sensation in all the limbs, especially worse in the muscles of the back. The sore, bruised pain was increased by pressure with the fingers.

Eight, A.M. — Twenty drops. Hot, dry feeling, over the whole body, with a sensation as of having slept without undressing, or having sat up all night. The tongue coated yellowish, with red papillæ; bitter taste in the mouth, with absence of thirst. Appetite deficient, and food has an unnatural taste, as on recovering from a long illness. Mental lassitude, as on the previous day. The right hypochondriac region is swollen, and the clothes feel too tight. Irritable mood; a very slight annoyance keeps recurring to his mind, impelling him to speak about it. Better able to study than on previous day, but difficult to concentrate his thoughts. More forgetful than before the proving; and yet,

by collecting the thoughts, able to recall things read many years ago. Able to supply some additional items to a professional paper, intended to be exhaustive. At four, P.M., the lumbar pains, aggravated, with stitching pains in the right hypochondriac region, which is swollen. At half-past six, P.M., racking frontal headache, with heat of the face and head. Able to examine patients, but inclined to hurry through with it; and, in selecting the remedy, inclined to follow Fred Humphrey's rule, — "First impressions are the best." The appetite good at supper; pressure on the stomach, and increase of the hepatic pains after a light meal.

Quarter past ten. — Twenty drops. No stool today, but continual urging in the rectum.

Dec. 4.—Awake nearly all night from the harassing nature of the pains, especially in the back, — in all the regions, but especially the dorsal. Dry heat; most on the parts where the pain is worst. The hepatic pain is aggravated, also the urging in the rectum. At breakfast, repugnance to butter; even a small quantity aggravates the epigastric pain.

Three, P.M.— Twenty drops. All the symptoms are aggravated in the warm room and ameliorated in the open air. The muscular pains are relieved by rapid motion in the open air, though they are worse on commencing motion. Rumbling in the bowels, with tenderness on pressure.

Dec. 5.—Awoke by the pains in the back; less in the limbs than on the preceding day. The pain accompanied by rumbling in the bowels, with bloating and tenderness on pressure. Liver feels heavy and sore, especially when lying on the left side. Less pressure on the rectum than formerly. The mental lassitude and forgetfulness continue. At supper, ate some sour apple-sauce, when all the symptoms became milder and gradually disappeared. During the whole experiment, the urine was redder than usual.

Fourth Proving.

Dec. 13, 1867, twenty-five minutes past noon.—Being in excellent health, a little before dinner-time, took, five hundred drops of the concentrated tincture. Before taking the dose, had a good appetite, but, after swallowing it, found that he could not bear the sight or smell of food, especially of roast beef. Rumbling in the stomach, with inclination to vomit. Chilliness and shivering over the whole body; could not keep warm, even by sitting over the stove. Confusion of thought, with hurriedness of manner. Forgetfulness,—writing one familiar word for another of similar sound. Pulse quickened from 72 to 104 in fifteen minutes; small and hard. At quarter to one, P.M., on turning the head to look at the clock, taken with sudden giddiness and with faint feeling. Sick and faint, with a sudden shrinking from any mental work. At five minutes to one, P.M., the taste of the medicine continually returning in gusts to the mouth; a feeling as if vomiting would relieve. Turning the head, even gradually, aggravated the vertigo. At one, P.M., pressure over the eyes, aggravated by lifting the eyebrows. Sudden sleepiness. Five minutes later, too giddy to sit up. Ordinary conversation in the room greatly annoys. Ten minutes past one, P.M. The qualmishness increased, and the old pressure at the rectum returned. Rising from the chair aggravated the vertigo; the frontal headache was aggravated by moving the eyes, and by noise; speaking aggravated the nausea. Shivering in a warm room, and the head hot; shivering from the hips downwards. Rising aggravates the giddiness, and also the nausea. Burning and qualmishness at the stomach, with pain on pressure. Attempting to walk aggravates the vertigo very much; unable to stand alone.

Eructations, tasting of the medicine, with increased nausea; bitterness in the mouth, with dryness. Twenty-six minutes past one, P.M. The pain in the head, the nausea, and the pressure

in the rectum aggravated by rising. A little ordinary writing, difficult, from vertigo and confusion of mind. Thirty-five minutes past one. Pulse 126, small and thready; shivering, with chattering of the teeth, scarcely comfortable near a large fire. Ten minutes past two. All the symptoms ameliorated by a walk in the open air. Half-past two, P.M. Aching, drawing pains in the left ankle, aggravated by motion; the pain extends up the calf of the leg. Dryness of the mouth, with bitter taste. Drawing pain in the left elbow. Ten minutes later. Extreme forgetfulness. Quarter to three, P.M. Violent urging to stool. Three, P.M. Stool of more fluid consistence than usual, and of very fetid smell; followed by renewed urging in the rectum. The passage is accompanied by chilliness and shivering. Twenty-five minutes past three, P.M. Marked dryness of the lips and tongue, with hawking of mucus from the pharynx. Sickly paleness of the face, especially around the eyes. Languid and dull, with little inclination for either mental or physical exertion.

Quarter to four, P.M. Shuddering and horripilation, with eructations tasting of Ptelea. At Four, P.M., a griping, contractive pain in the stomach for half an hour. Half-past four. The pain moved downwards to the abdomen. Quarter to five. Urging to stool, and sudden discharge of a quantity of thin diarrhœic fæces, of cadaverous smell, with smarting of the anus. Rumbling in the bowels after stool. Five, P.M. Rending pains around the left knee, which come and go rapidly. Very little appetite, after eleven hours' abstinence, with a strong repugnance to butter. Twenty minutes past seven, P.M. Another stool of the same nature as the previous one, yet somewhat thinner in consistence, and even more cadaverous in smell. Lassitude of mind, with disinclination to study; tasks performed in a perfunctory manner. Thirty-five minutes past eight, P.M. Griping in the bowels, with swelling of the liver, which is tender to pressure.

Retired at nine. Very sick indeed. After a restless, dream.

haunted slumber till one, A.M., awoke with a seated, dull, heavy pain in the abdominal region, felt distinctly in the liver, which was easiest when lying on the right side; also a feeling of pressure on the lungs, and of suffocation when lying on the back. Lying on the left side, the liver dragging on its ligaments, and swollen and tender even to a light touch. There is also griping in the bowels, with rumbling, and pressure in the rectum. Abdomen bloated; pressure increased the griping. Rending, tearing pains in the left scapula. Head hot and feverish, with dull aching in the frontal region, especially on moving the eyes. Dry heat over the whole body, especially on the palms of the hands. Restless and uneasy; unable to sleep. At half past five, A.M., fell into a light sleep, and awoke at seven, tired and unrefreshed.

Dec. 14.—Bitter taste in the mouth; tongue dry and coated, light brown. Appetite at breakfast poor, with the usual repugnance to butter. Eating a very small piece of cheese aggravated all the hepatic and gastric symptoms. All the symptoms are better in the open air, though rapid motion causes sharp pains in the right hypochondriac and epigastric regions. The griping and rumbling continue, and there is pressure on the rectum, such as precedes a dysenteric passage. Urine scanty, and of a deep reddish-yellow tint. Labor performed in a perfunctory manner. Mind feels dazed and languid.

Quarter past eight, A.M.—A discharge of fæces, coated with slime. The passage is followed by tenesmus, which brings on a small discharge of fæces with a larger quantity of mucus, and this again is followed by tenesmus. During the stool, shuddering with chilliness of the sacral region; after the stool, smarting of the anus, with itching. The dejection does not relieve the pressure of the rectum, which becomes worse as night advances. Half past ten, P.M. The pulse at 104, very small and weak. Eleven, P.M. A sudden attack of vertigo, lasting about one minute. Quarter past eleven, P.M. Great dryness of the mouth.

Dec. 15. — Slept from midnight till about seven, A.M. The pain in the forehead is deeper in the brain than it has been. Pressure, as of a stone at the pit of the stomach, aggravated by a light meal. Dry heat over the body, with sweat on the forehead. Eleven, A.M. A dull, aching pain in the small of the back, aggravated by motion. Thirty-five minutes past eleven, A.M. Acute, cutting pain in the spleen. Forty minutes past two, P.M. Aching, drawing pains in the left scapula and shoulder-joint. Ten, P.M. All day had felt extremely weak. Remembered having heard Dr. Constantine Hering in his famous morning lectures, which, with characteristic kindliness, were without money and without price, lay down the position that "*provers generally indulge in superlatives.*" Nevertheless, felt entirely justified in writing "extremely weak." Felt weak in every limb, — weak in brain, weak in memory, thought, and will, as if a powerful and all-pervading disease had fastened upon him.

Dec. 16. — Slept all night, though the sleep was dream-haunted, as before. Became conscious of a dull, aching pain in the small of the back; motion adds a sharp, sticking pain to the dull one. Heavy, aching pain in the liver, with deficient appetite. Half past eleven, A.M. Copious stool of fluid consistence and bilious smell, with a very copious expulsion of ascarides. Stool followed by tenesmus, and succeeded by itching and smarting of the anus. Had to work a good deal to-day, though weak in body and mind.

Dec. 17. — Slept from ten, P.M., till four, when he was awakened by the severity of the lumbar pain, worse than yesterday morning. Weight and pain in the liver relieved by lying on the right side; aggravated by lying on the left, which causes a dragging pain. Griping in the epigastric region, with dryness of the mouth, yellow-coated tongue, and bitter taste. Weak and irritable all the forenoon, and with the frontal headache incessant through the proving. Legs weak during the forenoon, with drawing pains in the knees and the flexor muscles.

Dec. 18. — One long and remarkably vivid dream all night, till four. Awakened by hepatic and gastric symptoms, all of which are aggravated towards morning. The urine, all through the proving, of deep reddish-yellow, and small in quantity. No stool all day. Appetite better than on former days.

Dec. 19. — Last night sat up till half past eleven, with a view of testing whether the early waking was a result of the remedy, or a mere accident. Was very sleepy when he went to bed, but, nevertheless, awoke about half past three. The gastric and hepatic symptoms were milder than they had been. Forty minutes past seven. A stool of natural consistence, smell, and appearance. Appetite at breakfast very poor, with muddled feeling in the head. Ten, P.M. All the symptoms have declined to-day, especially the headache.

PROVINGS BY DRS. FISH AND TRAIN.

Prover, twenty-five years old, with nervo-sanguineous temperament; light hair, blue eyes, and light build; weight one hundred and thirty-five pounds; in excellent health, having been free from sickness of any serious character for years; appetite good; diet temperate, using coffee once a day; continued the same during the proving as before; never used intoxicating liquors in any shape, nor tobacco.

First Proving.

March 30, 1867, ten, A.M. — Took ten drops of the tincture. Soon experienced a sensation of nausea, with a nervous pain alternating from the left arm to left eye and parietal region.

Noon. — Ten drops. Dinner in half an hour, followed by an empty feeling in the stomach.

Two, P.M. — Fifteen drops. Great lassitude and weariness throughout the afternoon. Unusual fatigue after slight exertion.

Half past six, P.M. — Twenty drops. Nausea for a few minutes. In about an hour began to be feverish, thirsty, lips cracked

and sore,—an unusual occurrence with the prover. Slept soundly during the night. Saliva very profuse; ran from the mouth during sleep, and wet the pillow.

March 31, four, A.M. — Awoke (earlier than customary) with some fever, accelerated pulse, parched mouth, and an awakening of sexual desire. Took no medicine during the forenoon. Slight, continuous headache, lowness of spirits.

Two, P.M. — Twenty drops one hour after a hearty meal. Felt a burden in the stomach soon after, although previously no discomfort was produced by the dinner. It all passed away in two hours. Four, P.M. Felt very well; some lassitude.

Six, P.M. — Thirty drops. Within ten minutes, a full, throbbing headache, with dizziness and nausea; radial pulse, 68, but very strong, so as to be readily seen. Headache continued the same for half an hour, when it became sharp, and darted from temple to temple; very painful, especially when moving. Urinated five ounces (two ounces more than normal quantity). Natural in appearance; no evidence of albumen or urea crystals by tests. At seven, P.M., pain in the hypogastrium, in the region of the bladder; continued fifteen minutes. During this time the headache intermitted. Headache resumed in the left zygomatic region. These aches are very changeable, shooting rather quickly from place to place. Dull pain sets in about eight, P.M., in the umbilical region, quite severe, continuing half an hour. All symptoms disappeared during the evening.

Half past nine, P.M. — Thirty drops. Urinated five and a half ounces; clear. Retired soon after, and slept soundly during the night.

April 1, five, A.M. — Awoke refreshed; saliva flowed from mouth very profusely during the night; sexual desire increased; flatulence. Pulse slow, strong, irregular, 60; urinated six ounces; normal in appearance.

Six, P.M. — Twenty drops. Slight return of the head symp-

toms. In half an hour, full, pressive ache in the frontal and temporal regions.

Eleven, A.M. — Thirty drops. Stool, natural; headache, oppression at the epigastrium; unsteadiness and nervous irritability.

Half past one, P.M. — Thirty drops. Rumbling in the bowels; constriction of the pharynx; painful sensations in the temporal region, continuing over an hour. During the afternoon, a sensation of languor and weariness spreads over the whole system.

Six, P.M. — Thirty drops. Dull, oppressive headache came on while reading, about nine. Urinated six ounces; rumbling in the bowels; perceptible increase in the flow of saliva. Retired at ten. Slept well, with the exception of troublesome driveling.

April 2. — Awoke about six, A.M. Took no medicine during the forenoon. Very languid; energy entirely gone. Appetite normal; urinated seven ounces. Stool natural; borborygmus; considerable flighty headache. Took ten drops at three, P.M., at fifteen minutes past, at half past, at four, and at half past. The attendant symptoms were headache, oppression, pain in the stomach, evident signs of gastralgia, tenderness at the sternum, and sensitiveness to the light during the whole day.

Five, P.M. — Twenty drops. Slight nausea; pulse full and hard, very irregular; feeling as of sand in the stomach; urinated six and a half ounces, clear, normal. Retired at nine with the usual feeling of *malaise;* head just ready to ache. Slept unusually well; saliva not so troublesome.

April 3, six, A.M. — Awoke with desire to urinate; passed seven ounces, clear. Unusual hunger, craving for acid food. Twenty drops. Headache in the frontal and temporal regions.

Eleven, A.M. — Twenty drops. Headache; weariness; urinated seven and a half ounces. Two, P.M. Headache in the occipital region, lasting half an hour, passing then to the frontal, over the eyes, not very severe. Six, P.M. — Twenty drops.

Passed seven ounces clear urine, natural stool. At ten, P.M. urinated five and a half ounces. Uneasiness in the bowels, with flatulence; unusual quantity of saliva, thin and watery. Retired at quarter past ten. Sleep disturbed by dreams. Driveling.

April 4, six, A.M. — Awoke feeling much refreshed; no pains or aches; urinated nine ounces. Took no medicine during the day. The day passed with scarcely a recurrence of symptoms till evening, when the feeling of uneasiness in the bowels (umbilical region) came on, increasing in severity until nine, when it was almost intolerable. It was of a peculiar character, bearing down, sometimes spasmodic, and griping; sometimes sharp and throbbing. Ten, P.M. Some relief, but a headache set in, confined to the temporal regions. Urinated seven and a half ounces. This really severe attack passed off by midnight, and sleep brought entire relief.

April 5, half past five, A.M. — Awoke with the same pain in the bowels as the night before. Appetite poor; ate a light breakfast, which seemed to afford some relief.

Nine, A.M. — Twenty drops. At quarter past ten, pain in the bowels came on with redoubled vigor; headache also set in; obliged to lie down; great increase in the amount of saliva; urinated eight ounces. One, P.M. Pain less; headache less; appetite pretty good; ate a light dinner. Two, P.M. No pain for an hour and a half. Three, P.M. A slight touch in the umbilical region, disappearing in half an hour. Drowsiness succeeded, and the slightest effort seemed to weary. Five, P.M. But little change; no prominent symptoms. Retired at half past ten. Urinated during the evening eight and a half ounces; stool natural.

April 6. — Slight headache in the morning. No trouble in the stomach or bowels until after dinner, when, immediately after eating, the stomach seemed perfectly empty; very troublesome sensation of goneness. Somewhat feverish; pulse natural,

rather full. During the preceding days the fever-symptoms had been absent. Some headache during the evening. Urinated during the day twenty-five ounces. Stool natural.

April 7, half past five, A.M. — Headache set in upon waking; continued during the forenoon. Pulse 85, full. Feverish; thirsty, with a dry feeling all over the system. Voided twenty-seven ounces of rather clear urine. No further symptoms.

April 8. — No symptoms during the entire day, except the same nervous weakness of the eyes, experienced during the early part of the proving. Whole system seems relieved. Urinated twenty-two and a half ounces. Pulse natural; stool natural.

April 9. — Slight headache in the morning. Feels perfectly well.

During the above proving, the appetite was generally good, the bowels natural; respiration unchanged; pulse, first full and hard, but, during the severe symptoms, quiet; again feverish and full at the close. Urine greatly increased in quantity, in quality unchanged. Saliva very abundant; almost constant driveling during sleep.

Second Proving.

April 16, 1867. — One week from the last record of the first proving. During the past few days the prover has felt unusually well.

Seven, A.M. — Forty drops of tincture. Slight nausea.

One, P.M. — Forty drops. Quick, sudden starts of headache during the afternoon; *malaise.*

Seven, P.M. — Forty drops. A general change in the system seemed to have taken place, and the former weary feeling supervened, with tenderness of the abdominal viscera, — i.e., readiness to become painful. Retired at ten. Felt a strange uneasiness in the bladder and prostate. Smarting sensation

in the urethra upon urinating, rising out of bed for the purpose. Nearly ten ounces were passed. Smarting in urethra continued for twenty minutes after urinating.

April 17, morning. — Felt well. Eight, A.M. — Sixty drops. An immediate feeling of heaviness in the stomach; eructation of wind; nausea; felt well in an hour.

Ten, A.M. — Sixty drops. Repetition of former symptoms. Well again an hour after.

Three, P.M. — Sixty drops. Headache now set in. At about five, the old pain in the umbilical region became a prominent symptom. The headache and pain continued without intermission; both rather severe.

Ten, P.M. — Took sixty drops and retired. Passed a restless night. Arose twice to urinate. Passed during the day and night thirty one ounces. Stool natural.

April 18, five, A.M. — Arose, feeling sore, tired, and sick. Headache soon set in. Urinated nine ounces.

Eight, A.M. — Sixty drops. Appetite not very good. Umbilical region very tender, and seemingly on the point of aching. Noon, ate a light dinner. Urinated eight and a half ounces.

One, P.M. — Sixty drops. During the afternoon noticed an increase in the amount of saliva. Spitting became frequent, though unusual in health. Headache severe.

Three, P.M. — Sixty drops. Pain in the umbilicus and stomach set in with vigor. Throbbing headache in the frontal and temporal regions; very painful. Pain in the abdomen, very severe. Nervous irritability of the eyes. Urinated six ounces. Stool natural.

Seven, P.M. — Feeling very sick. Took sixty drops, and retired. Restless, and in pain all over the head, stomach, and bladder. At eight, was obliged to get up and urinate; passed six and a half ounces. Considerable burning in the urethra. Heat in the region of the prostate. Pulse full, hard, tense, but not rapid. Skin dry and parched; lips cracked, although the

saliva is greatly increased in quantity, and keeps up a constant driveling while lying on the face. Rolled around till after midnight, when sleep gave some intermission to the constant pain.

April 19, nine, A.M. — Arose with headache, feeling very sore, tired, and disgusted with everything. Urinated about six ounces. Pulse more rapid (90). Took one hundred drops, followed in an hour by thirty-five more. Nothing experienced from the fresh doses until about half past eleven, when, on a sudden movement, the headache became violent, and the whole abdominal region began to ache and pain. Rumbling in the bowels, followed at half past twelve by a diarrhœic stool, very dark in color, and sulphurous in smell. Pulse much more natural than on the preceding day. Saliva very abundant. Appetite all gone; eyes sensitive to light; general *malaise*. Pain in the bowels was eased but a moment by the stool. Three, P.M. Symptoms unchanged. Half past four. Headache confined to the left side. Abdominal pain settled to a steady, dull pain, not so severe as before. Diarrhœic stool. Headache passed off after the stool. Abdominal pain the same. Six, P.M. Headache resumed. Relieved at nine, feeling better than the night before, yet in much pain. Urine not measured during the day; about the same in amount as the day before; saliva not very troublesome.

April 20. — Same general feeling of *malaise*, tenderness and pain in the umbilicus, and dull headache continued all day. Slept most of the afternoon. Three stools during the day, rather diarrhœic; urine nearer the normal amount; pulse rapid, — from 80 to 90; saliva troublesome.

April 21. — Occasional headache; bowel pains continue. Stools diarrhœic. Diarrhœic stools continued a full week, when the unnatural condition was removed. In a week more, the tendency to headache had passed off, but it was full three weeks before pressure on the abdomen could be endured without pain.

An unusual amount of saliva has troubled the prover ever since. Urine natural in a few days.

THIRD PROVING.

Prover, twenty-one years of age; nervo-sanguineous temperament; light-brown hair; gray eyes; weight, one hundred and twenty-five pounds; in good health; no constitutional disease; temperate in habits, never indulging in the use of ardent spirits or tobacco. The medicine was of the third dilution, prepared with distilled water by the decimal scale, from Prof. Hale's tincture. Diet unchanged during proving.

April 15, 1867, seven, A.M. — Took five drops. No symptoms. At eleven, took five drops. No symptoms. At six, P.M., five drops. Tickling in urethra after urinating. Urine deposits muddy sediment.

April 16, seven, A.M. — Ten drops; dull headache set in at about ten.

Half past eleven. — Ten drops. At two, P.M, urine increased in amount, filled with whitish sediment. Sensitiveness of the urethra; headache continues.

Six, P.M. — Ten drops. Feeling of nausea; pulse rapid at bedtime; oppressive headache over eyes.

April 17, seven, A.M. — Fifteen drops. No symptoms during forenoon. Fifteen drops at half past eleven. Headache during afternoon; soreness at pit of stomach; appetite poor.

Six, P.M. — Fifteen drops. Headache increases during evening; quite severe upon retiring. Urine more nearly normal.

April 18, six, AM. — Arose feeling restless and uneasy. Sleep disturbed by dreams. Perceptible increase in sexual desire. Awoke during night with nightmare.

Seven, A.M. — Took fifteen drops. No special symptoms during forenoon. Took fifteen drops at half past eleven; pulse, small and rapid; thirst; furred tongue; poor appetite; desire for acid food; headache; nervousness.

Six, P.M., fifteen drops. Diarrhœic stool; headache contin-

ued; drank a great deal of water; retired at nine, feeling unwell.

April 19, seven, A.M. — Took fifteen drops. Repetition of symptoms of day before; diarrhœa; five stools during the day.

Half past eleven.—Fifteen drops. Headache during afternoon; feverish.

Six, P.M. — Fifteen drops. Felt better during the evening; urine, normal.

April 20, seven, A.M. — Slept much better than night before. Took fifteen drops. Headache; some diarrhœa; no further symptoms during day, with the exception of a diarrhœic stool and feeling of *malaise*.

April 21. — Awoke with slight headache, which passed off during the forenoon; diarrhœa; urine increased in quantity; pulse natural.

April 22. — No symptoms.

The diarrhœa passed off in the course of a few days, and no further effects were experienced from the proving.

PROVINGS BY WM. H. BURT, M.D.

Prover of sanguine-nervous temperament, with a little of the lymphatic; weight, one hundred and forty-eight pounds; habits temperate, using no form of distilled or spirituous liquors, tobacco, coffee, or the like. Health excellent; appetite good; bowels move regularly once a day, generally in the morning.

First Proving.

April 20, 1867, six, A.M. — Took half an ounce of thirtieth dec. dil., prepared by myself in rain-water. Had a natural stool before breakfast. At ten, A.M., had a stool of a mushy character, with distress in the hypogastric region. At noon, dull, pressive pains in the temples, with occasional fine, neuralgic pains in the temples. The headache is aggravated by walking. Headache continued all day, with eructations of sour fluid

rom the stomach, and great lowness of spirits. A sour stomach is something he is never troubled with.

April 21. — Great depression of spirits all day, with a black, lumpy stool at two, P.M.

April 22, six, A.M. — Took half an ounce one hour before eating. Felt unusually well all day until eight, P.M.; then had colicky pains in the small intestines every few minutes for one hour; the pains were not severe.

April 23, five, A.M. — Mushy stool; another at ten, P.M. Unusually irritable all day, with slight, colicky pain in the epigastric region, and drawing distress in right hypochondrium. Legs ached all day.

April 24, six, A.M. — Half an ounce. Had a few sharp pains in the arms in the morning. While in bed in the evening, had fine, prickly pains in the fingers.

Second Proving.

The thirtieth dilution produced so few symptoms upon him, that he determined to use the sixth, prepared as before, in rain-water.

April 27, six, A.M. — Feeling well. Took half an ounce an hour before eating. At half past six, severe distress in the region of the spleen. Seven. Sudden, pressive pain in the temples; it feels as if the temples would be pressed together; with distress in the epigastric region. Eight. Natural stool, followed by distress in the anus. Nine, A.M. Constant distress in the small intestines, with an urgency to stool. Occasional flying pains in the abdomen. Dull, frontal headache, feeling as if the temples would be pressed together. Drawing pains in the left heel. Noon. Have had frequent distress in the bowels. Two, P.M. Had severe nausea for five minutes, with distress in the umbilicus, and dull, pressive headache. Frequent fine pains in the fingers, and region of the spleen. Nine, P.M. Languid all day, with aching distress in all the

joints, especially in the knees, ankles, and feet. All the evening had a drawing, aching distress in the right hypochondrium.

April 28, seven, A.M. — Half an ounce, half an hour before breakfast. A number of times through the forenoon had a feeling in the forehead as if it was being pressed together from temple to temple, with severe distress in the region of the spleen and right side of umbilicus; stool rather constipated. Very languid all the afternoon, with severe, aching distress in the wrists, knees, ankles, and feet. Fine, sharp pains in the fingers. Dull, aching distress in the small of the back. Constant aching distress in the whole abdomen. The pressive headache has troubled me more than any other symptom to-day, with the aching in the back and legs.

April 29. — Awoke with severe backache, which passed off in one hour. Seven, A.M. — Half an ounce, an hour before eating. Several times through the forenoon had pressive pains from one temple to the other; natural stool. Very languid from noon until six, with flushed face and a feeling as if I had fever; but the pulse was two beats below the natural standard. Constant frontal headache, with severe pressive pains in the temples, from one temple to the other, every ten or fifteen minutes. Almost constant cutting pains in the left umbilical and epigastric region, with aching distress in the right hypochondrium. Frequent rumbling in the bowels, with desire for stool. Dull backache.

April 30. — Awoke with severe pain in lumbar region.

Seven, A.M. — Half an ounce, one hour before eating. Had constant pressive headache, with aching distress in the bowels, back and legs, with great languor, all the forenoon. Natural stool. Head, back, knees, and calves of the legs continued aching severely all day, with rheumatic drawing pains in the elbows and bowels. Fauces feel sore. Atmosphere quite damp.

May 1, 1867. — Languid all day, with aching distress in the small of the back, knees, and calves of the legs. A number of times through the day had hard, pressive pains in the temples.

Very irritable and desponding. Natural stool. Frequent drawing pains in the right and left hypochondrium. Occasional sharp pains in the stomach.

May 2. — Legs and back ached all the afternoon. Several times through the day had drawing pains in right elbow-joint and fingers. Natural stool.

May 3. — Natural stool. Legs ached all the afternoon until seven, P.M.

Third Proving.

May 6, noon. — Feeling well. Took half an ounce of the second dec. dil., half an hour before dinner. In the afternoon, had hard, pressive pains at times in the left temple, with frequent cutting pains in the epigastric and umbilical regions, and constant drawing pains in the wrists, knees, and ankles, worse in the right knee and right wrist and fingers. Had very severe aching distress in the right knee all the evening; had repeated colicky pains in the small intestines, lasting but a minute or two at a time.

May 7. — Natural stool, morning and night, with colicky pains in the hypogastrium in the evening, before stool.

May 8, six, A.M. — Half an ounce. In the forenoon had slight distress in the abdomen, but all the afternoon had severe aching distress in the whole lumbar and sacral region. Natural stool, morning and night.

May 9. — Awoke with hard headache; passed off in a short time. Natural stool. Seven, A.M. — Half ounce of the first dec. dil. one hour before eating. At eight, A.M., sharp pains in the umbilicus. Three, P.M. Excessive languor, with a feeling as if he had fever; pulse 88, soft and weak, with constant inclination to yawn. Five, P.M. For the last hour has had colicky pains in the umbilicus, and drawing pains in the hands and ankles. Pulse 74; feeling much better. Once in the evening had hard, pressing pains in the right temple.

May 10.—Awoke with severe backache, which lasted about half an hour. Six, A.M.—Two ounces first dec. dil. one and a half hours before eating. At eight, A.M., natural stool. Several times in the forenoon had severe cutting pains in the right temple. Noon. For the last hour has had constant distress in the right hypochondrium and epigastric region, with drawing pains in the fingers and ankles. Three, P.M. Very languid and feverish; pulse 88. Has had frequent cutting pains in the umbilicus.

May 11.—Same symptoms as yesterday, but not so strongly marked.

Had a few rheumatic symptoms for several days, similar to the above noted.

Fourth Proving.

May 27, 1867, six, A.M.—Feeling well. Took forty grains of the solid extract, prepared by myself from the bark of the root of a Ptelea tree six inches in diameter. In twenty minutes, sharp neuralgic pains in the right temple. In forty minutes, dull distress in the stomach, with fine stitches in right temple. Seven, A.M. Frequent darting pains in right temple, with constant distress in stomach (probably mechanical). In one hour and ten minutes after taking the medicine, ate breakfast, which relieved the distress in the stomach. At nine, A.M., natural but lumpy stool. Same pains in the temples. Tongue feeling as if it had been scalded; the whole upper surface feels as after taking Aconite. Noon. Has had, a number of times, fine, sharp pains of a pressive character in the left temple. Tongue still has fine, sticking pains all over the upper surface. Frequent distress in the stomach. Aching distress in the calves of both legs. Hands hot and dry. Three, P.M. Feeling feverish, hands are hot and dry, and ache constantly. Pulse 80. Occasional pains in the left temple. At five, P.M., hard, dull, aching pains in the wrists, hands, fingers, and ancles. Nine, P.M. Tongue

has felt as if it were scalded all day; occasional pains in the bowels. Languid feeling. Thermometer 62. Rainy day.

May 28. — Slept well; awoke very languid. Tongue coated yellow, and feeling rough. Urine high-colored. Lumpy, dark-colored stool.

Six, A.M. — Took eighty grains. Ate breakfast an hour and a quarter after. Eight, A.M. Dull headache, with a feeling as if he had fever; breath seems to burn the nostrils. Tongue feeling as if it had been burned. Nothing tastes natural. Distress in the epigastrium; had constant dull headache all the forenoon, with frequent paroxysms of pain in the right temple, as if it would be pressed to the left side. Noon. Smarting of the eyes. Acrid feeling in the tongue. Languid and feverish. Rheumatic pains in the wrist, hands, fingers, knees, and ankles. Four, P.M. Languid, with dull feeling of the head. Several times through the afternoon and evening had sharp, colicky pains in the umbilical region. Thermometer 70. Cloudy day.

May 29. — Slept well. Rough, flat taste in the mouth; tongue yellow, coated along the centre and base. Natural stool.

Six, A.M. — One hundred and fifty grains. In half an hour, hard, pressive pain in right temple. Breakfast at half past seven. Nine, A.M. Severe, dull headache, aggravated by walking upstairs. Stinging, biting sensation all over the tongue. Teeth all ache and feel sore; increased flow of saliva that tastes saltish. Hands and fingers ache constantly. Ten minutes before noon. Severe nausea for two minutes, with efforts to vomit. Has had a severe dull headache all day, aggravated by walking. Increased secretion of saliva, with biting sensation in the tongue. Burning distress in the epigastrium (not severe). Slight colicky pains in the umbilical region. Dull, aching distress in the hands, fingers, knees, and ankles. Breath seems so hot that it irritates the nostrils; pulse 74. Languid. At two, P.M., soft stool. Nine, P.M. Same symptoms as in the forenoon, but not so strongly marked.

PROVINGS BY MRS. S. M.

Under the Direction of Dr. Cowles.

Prover aged twenty-seven; of a bilious-sanguine temperament; with dark-brown, or almost black, hair and eyes; of decided, yet mild, disposition; with strong constitution. A housekeeper. General health has been regarded good. Has been troubled somewhat with sedimentous urine, after the use of some kinds of food. Some tendency to rheumatism. Requires about eight hours of sleep regularly; subject to dreams, yet sleep is good and refreshing. For some days previous to proving, found urine as follows: Variation in quantity from twenty-two to thirty-five ounces; average for fourteen days was twenty-eight ounces. When it was the least, it had some red sediment upon standing. Weather mild and pleasant. No epidemic.

First Proving.

April 6, 1867.—Took ten drops of the first dec. dil. on sugar, regularly three times a day, about one hour before eating. Ten, A.M. Feels a trembling and weariness in the lower limbs. Two, P.M. Rumbling in bowels. Four, P.M. Stitches in shoulder and hip. Nine, P.M. Dull pain in left shoulder-blade, and some unpleasant sensation in stomach; sticking pain in left knee.

April 7.—On getting up, had a feeling of lameness in small of back. Urine during last twenty-four hours only sixteen ounces, with reddish, cloudy sediment. Six, P.M.—Soon after taking the drug, had a pain behind the right ear; also twice during the evening.

April 8.—Lameness in back on getting up. Twenty ounces of clear urine. Half past eleven. About half an hour after taking drug, had a sharp pain behind the right ear, near the carotid artery. Three, P.M. Hiccough; face burns; dull

pain in right side of head; pain behind right ear. From two to six, slight burning in face, followed by rheumatic pains in right leg and arm. Nine, P.M. Pain in back of left breast near the axilla; feeling rather languid; appetite somewhat increased.

April 9. — Had dreams of food and awoke hungry. Dull, rheumatic pain in anterior muscles of right femur and humerus, which disappear after getting up. Twenty-four ounces of rather red urine. Afternoon. Some pain in left biceps muscle. Six, P.M. Pain behind right ear, in left temple and in back of neck. Ten, P.M. Hard pain in left side of head, and behind right ear.

April 10. — Slept pretty well, but had some dreams of food. Awoke towards morning, feeling somewhat feverish. Awoke having hard, sticking pain in left temple, followed by a dull headache, and cords of the neck lame on the right side; occasional stitches behind the right ear; pulse 104, quick, small, and somewhat intermittent; mouth and throat dry; a faint feeling in stomach. About noon, headache, worse in left temple; pain in back of neck; whole neck feels swollen; pain in right mastoid process of temporal bone. Two, P.M. Pulse 84; head aches, and feels large. Three, P. M. Pulse 96; hot flushes and pain in top of head and eyes. For three days has had no stool till to-day. Stool nearly natural. Rainy by spells to-day. Feels sick all over and indifferent to duties. Went to bed in the afternoon and soon to sleep. Awoke at five, P.M., with pain behind right ear and in shoulder, near the spine of right scapula; a lame spot on the inside of right knee as large as a penny; otherwise quite well.

April 11. — A cool night after the rain. Had ten hours of sound, refreshing sleep. Feels quite well; pulse 80; twenty-eight ounces of clear urine in the last twenty-four hours. Lame spot still felt; back somewhat lame on waking. Eleven, A.M. A few minutes after taking drug, had a very severe pain in the right ear;

had been ironing one hour. Pulse 92. Two, P.M. Severe backache, worse in lumbar region; transient rheumatic pains in right side and right shoulder-blade; dull pain in region of liver. Had a slight headache and an unpleasant feeling in the throat all the afternoon. Five, P.M. Pulse 88, and occasionally intermitting. Seven, P.M. Feels as though diarrhœa were coming; desire for stool, tenesmus, but no stool. Heat and dryness of the œsophagus, as before.

April 12.—Slept ten hours. Awoke three or four times during the night with hard pain in the bowels; mouth and throat very dry. Awoke with backache, and unable to speak aloud for some time; a faint feeling. Twenty-one ounces of clear urine in twenty-four hours. Pulse 75. Weary feeling in the limbs; rheumatic pains in arms. Two, P.M. Pulse 106; hot flushes and slight headache. Seven, P.M. Hard backache the whole length of spine and back of neck; also through right shoulder. Appetite good, but no stool for two days.

April 13.—Had a restless night, full of dreams, with some fever. Backache in the morning, pain in the bowels, and constipation. Nine, A.M. Hard stool, and after it a smarting like piles. Some backache and shooting pains through shoulder and chest. Has taken no more of the drug since yesterday. Two, P.M. Pulse 96, with burning cheeks and hot flushes.

Symptoms passed off in three or four days after leaving off the drug. Less tendency to costiveness.

Second Proving.

May 7, 1867.—The tasks incident to a change of abode have required much more labor than usual. During the week past, has had a rather profuse flow of urine of a light color, with occasional rheumatic pains in upper and lower limbs, and neuralgic headache one afternoon, which was relieved by Aconite. Bowels regular, not having been costive since ceasing to take drug. Catamenia returned two days too soon, and quite copious.

The second experiment was with the sixth decimal attenuation. During the seven days of proving, took ten drops regularly three times a day. Weather warm and pleasant. No epidemic.

No symptoms on the first day, except a slight headache after a long walk. During evening took slight cold.

May 8. — Thirty ounces of clear urine during last twenty-four hours. Soft stool at seven, A.M. Eight, A.M. Pulse 88. Three, P.M. Pulse 82. No symptoms.

May 9. — Slept soundly all night, but dreamed of dead animals. Twenty-six ounces of clear urine in twenty-four hours. Nine, A.M. Felt a sharp pain behind the right ear; has not felt one since the last proving, and never any before that. Increasing appetite. No stool to-day.

May 10. — Slept well and feels well. Twenty-six ounces of urine in twenty four hours; pain behind the right ear at half past eight, A.M. Increasing appetite. At seven, P.M., soft stool, with tenesmus.

May 11. — Twenty-eight ounces of urine in twenty-four hours. Slept very soundly. Hungry all the time; unusual energy to work; in fact, feels better than before commencing the proving. At night had a slight headache. Retired at eight, and slept soundly all night.

May 12. — On awaking, had a pain in the small of the back, which ceased after rising, leaving, for a while, a tired feeling. Eight, A.M. Soft stool. At nine, A.M., felt a hard pain in the epigastrium, with slight feeling of nausea for about five minutes, and afterwards, three or four times during the day. Bowels slightly distended at night, and feeling like diarrhœa. During the day would be startled at slight, unusual sounds. Went to bed early, and slept soundly all night.

May 13. — Feels lame in the region of the kidneys, on waking. Soon after rising and taking drug, felt sharp stitches through the right lung, which is sound. Soon after, had a pain behind

the right ear, which she felt certain was caused by the drug. Bowels soon felt tendency to diarrhœa. Eight, A.M. Very soft stool. At ten, a darting pain under right breast. From two to four, P.M., headache on the left side, and sharp pain in left temple. Pulse 92.

May 14. — Awoke with headache and hunger, both of which passed off after a hearty breakfast. Urine twenty-eight ounces in twenty-four hours; clear. Took last dose in this proving this morning. Rumbling in bowels. Eight, A.M. Had a sharp pain in left ear. Two, P.M. After a walk, lay down and slept three hours. Awoke with slight pain near the heart, and afterward shooting pain under the right breast. Pulse, on rising, 100; one hour later, 80. Natural stool in the evening.

Remarks. — Thinks the provings have improved the condition of kidneys. Bowels nearly natural after first proving, but very costive since the second.

PROVINGS BY MR. ALLEN C. COWPERTHWAIT.

Prover a student of medicine. Age twenty years; mental-vital temperament predominant; dark hair; gray eyes; weighs one hundred and forty-two pounds; height five feet eight inches.

First Proving.

March 17, 1867. — Took five drops of sixth dec. dil., four times per day, — one hour before each meal, and before going to bed. Eleven, A.M. A severe frontal headache, lasting about ten minutes. One, P.M. Dull frontal headache, lasting all the afternoon.

March 18, seven, A.M. — Dull feeling, with sensation of weakness in upper extremities, which lasts all day. Towards evening the weakness extends to lower extremities.

March 19. — Nervous trembling of hands. Pressure in frontal region, extending into root of nose, with a sensation as if a

nail was being driven into the brain on the left side. Symptoms ameliorate towards evening.

March 20. — Before rising in the morning, sensation as of a foreign substance in the larynx; on rising, pain in the right hypochondrium, disappearing on pressure. Throat sore, growing worse in the afternoon. From four to eight, P.M., aching of right molar teeth, commencing in lower jaw and gradually extending to the upper of same side. After going to bed, colicky pains in umbilical region, with a desire to press them, but pressure aggravates; better on rising. Stomach feels empty. Pains shoot from right hypochondrium downwards.

March 21, ten, A.M. — Feeling as if the tongue had been cut in the middle, and was just healing up. Two, P.M. Aching of right molar teeth, lasting only a few minutes; returning at six, P.M., lasting the remainder of the evening. Seven, P.M. Sore throat; worse than yesterday. After going to bed, colic similar to that described yesterday, but not quite as severe.

March 22. — A dull, stupid feeling all day. Colic pains came on earlier than yesterday, and are of short duration.

March 23. — A feeling of dullness, and inability to pursue studies; otherwise well.

March 24. Took last of preparation last night. Three, P.M. Throbbing pains in the right hypochondrium.

March 25. — A general depression of spirits; no appetite.

March 26. — All the former symptoms, but greatly ameliorated.

March 27, six, P.M. — Itching of the right ear.

March 28. — Right ear inflamed, and somewhat swollen.

March 29. — Right ear broke out in white blisters on red base; copious discharge of a watery fluid on puncturing; shooting pains in ear, when lying on that side.

March 30. — Soreness and swelling of the lymphatic gland under right ear. Four, P.M. Steady, cutting pain in right hypochondrium.

March 31. — Vesicles on ear dried up, and cuticle desquamating. Aching in outer edge of ear, when lying down, relieved by pressure.

April 1. — No symptoms; perfectly well.

Second Proving.

April 8, 1867. — First dec. dil. taken same as in first proving. Seven, P.M. — Aching of right molar teeth, lower jaw.

April 9. — On rising in the morning, a feeling of pressure in frontal region, and in root of nose; dull, frontal headache all day.

April 10. — Soreness in the abdomen; occasional stitches in right hypochondrium; some colic after retiring at night.

April 11. — Colic pains in the morning before rising, with discharge of flatulence. Dull pains in the forehead; heavy feeling over the eyes; pressure in the nose. After going to bed at night, colic, with emission of flatulence and borborygmus; awakens from sleep.

Friday, April 12. — Before rising, colic, with excessively bitter taste in the mouth; headache all through cerebrum; relieved somewhat on rising; colic disappears on motion, but comes on at intervals all day, with frequent discharge of wind from the bowels. Occasional throbbing pain over eyes, first right, then left; nervous trembling of hands. Eruption under the right ear, discharging a watery fluid.

April 13. — Dull, heavy feeling in the head; severe pains in left iliac region, worse on motion, occasionally changing to right side. In the evening, when first lying down, intense throbbing pain, commencing in glans penis, and extending to left pubic region, and gradually disappearing. When lying on the back, a feeling of pressure on abdomen.

April 14. — Shooting pains in the head before rising in the morning. Nine, A.M. Throbbing pains in left hip, lasting only a few minutes. About noon, severe colic, which seems mostly

on the right side. Nervousness; an unexpected noise startles and causes a shooting pain over the eyes. Dizziness when walking. Nervous twitching of upper lip, extending to left eye.

April 15. — Throbbing pains in gluteal region. Cramp-like pains in region of the heart. In the afternoon, a severe headache, with depression of spirits, and a feeling of anxiety about some unknown thing.

April 16. — Headache over the eyes; weakness of the whole body; the walls of the chest, especially, feel as if they would sink in. Disposition to worry about something, he hardly knows what. Throbbing pains over left temple, then over right; colic pains below umbilicus. After going to bed, severe throbbing pains over eyes, first right, then left. Took the last of the drug at night.

April 17. — Sensation of fullness in brain. When walking, a cramp-like pain in the sacral region, left side, so severe that he has to stand still until it passes off.

April 18. — Occasional pains in right hypochondrium, shooting downwards. Cutting pains over right eye, sometimes left.

April 19. — When bending the body, cramp-like pains in cardiac region. In the evening, walls of chest feel as if they had not power to expand when breathing.

April 20. — Sensation as if food was lodged between the teeth on right side, commencing on lower jaw, extending to upper; teeth feel as if elongated. Throbbing pain over right eye; intense itching on back of right hand. Eight, P. M. Throat sore on right side.

April 21. — Throbbing pain over right eye, sometimes shooting from the root of nose upward. Two, P.M. Throat sore on right side; passed off about four P.M. Seven, P.M. Some colic pains in the hypogastrium; toothache on right side.

April 22 — Soreness and inflammation of fauces, worse on

right side; soft palate and uvula inflamed. Dorsum of tongue sore on right side, causing painful mastication and deglutition.

April 23. — Throat ulcerated on right side; right side of tongue inflamed, not swollen.

April 24. — Throat better. Throbbing pains in left temple.

April 27. — No symptoms, except a dull frontal headache.

April 28. — Severe throbbing headache on rising; weakness of the whole body; at times cold streaks run up and down the spine; great hoarseness of the voice; breath hot, eyes heavy; throbbing pains over left eye, also in right temporal region; throat sore; when coughing, head feels as if it would burst.

April 29. — Headache seems to be more in the cerebellum. In the afternoon, the nape of neck grows stiff, causing painful tension when moving.

April 30. — Sweat all last night. In the morning everything tastes and smells sour. Some throbbing pain in right temple. Swelling of lymphatic gland under right ear.

May 1, 1867. — Felt better generally; some pains in head on left side, but by evening the symptoms were all gone.

May 2. — In evening, intense itching of right ear.

May 3. — Ear swollen, little white vesicles rising under epidermis. Shooting and throbbing pains in right hypogastrium. A boil began to make its appearance on right side of forehead, (the first in his life).

May 4. — Swelling of ear increasing. Steady pain in left hypogastrium, continuing several hours.

May 5. — The white vesicles in ear assumed a purple tinge. Swelling of lymphatics was disappearing.

May 6. — Ear not so much swollen.

May 7. — Desquamation of cuticle of right ear; the blisters discharged water.

May 8. — A feeling of weakness through the whole body. Nausea, and bitter taste in the mouth; tongue coated yellow; headache; eyes heavy. Frequent eructations of wind from the

stomach; a distressing feeling of emptiness in œsophagus. Aching of right molar teeth, lower jaw, after going to bed; also shooting pains from left ear down to the spine.

May 9, seven, A.M. — Stinging pains in right ear; great soreness of the ear during the day; the blisters on ear scab over, and become filled with a greenish-looking pus; moving jaws painful. Five, P.M. Pains in ear of intense throbbing nature, worse on moving and exposure to the air. When walking, wants to hold his hand over it; sometimes pains shoot from it to the boil on forehead.

May 10. — Dull, heavy feeling in frontal region; face swollen in front of right ear, and painful to the touch. The ear is not painful to-day; some pus is discharged, and the scabs desquamate. After retiring, aching of right molar teeth on lower jaw.

May 12. — A slight bruise on the large joint of little finger of right hand inflames and suppurates, causing painful tension of the fingers of that hand.

May 15. — Ear healing up; boil on forehead discharges some pus every day.

May 16. — Vesicular eruption on right hand, commencing at the sore on little finger and gradually extending upwards.

May 17. — The eruption appears under right ear, and gradually extends over the whole face and neck, and on right hip; burning and itching sensation in the eruptions; on scratching, they discharge water.

Saturday, 18. — Burning in eruptions, increased on exposure to air; much worse to-day than yesterday.

May 19. — No more burning or itching; the eruptions began to disappear, and by the 22d they were all gone, and desquamation of the cuticle had set in. The boil on forehead discharged no more, and by the 25th it had entirely disappeared. About the same time another one made its appearance on right side of the chin, which continued painful until

June 2d, when it discharged some purulent matter, and then began to pass off; by June 5th, it was all gone, and from that date he experienced no symptoms.

During the above proving, he kept an accurate account of the rate of pulse, and could not detect any change; once, April 28, the pulse ran as high as 90; but often, in apparent health, it has been higher than that; average, during proving, 72. Kept account of the specific quantity of urine, and found but little change; standard, 1019,—average during proving, 1023. Since the proving, one of the right molar teeth of lower jaw has commenced to decay, but whether the effect of the remedy, or not, was uncertain.

GENERALITIES.—Right side principally affected; symptoms more from right to left, from above downwards, and from within outwards. Aggravated towards evening and on lying down. Ameliorated on motion and on rising.

Note.—Dr. Bacmeister, his preceptor, thinks it will prove a valuable antipsoric remedy: he has prescribed it in a case of eruption similar to that described in this proving, and it worked like a charm, curing the case in a few days.

PROVINGS BY C. H. LUTES, M.D.

Prover of nervo-bilious temperament; age thirty years; of good health at the time. Proving made with mother tincture, taken in water.

FIRST PROVING.

February 22, 1867, two, P.M.—Took three drops. Half past three, P.M.—Three drops. Nine, P.M. (In bed); sharp, thin pain across abdomen from side to side, half an inch above umbilicus; comes in flashes, at intervals of about one minute; relieved by pressure. Awoke in after part of the night with heartburn, and a sensation of fine, violent agitation of all the muscles of the body and limbs, worse in hands and fingers. This sensation passed away gradually in about five minutes.

February 23, seven, A.M. — Six drops. Nine, A.M. Sensation of intoxication; fits of vertigo, lasting three to five minutes, relieved by moving about, but worse on sudden motion. Sensation as if all objects about him were in quick, violent agitation. Ten, A.M. Sensation of cold and numbness in hands; they feel clumsy and stiff, with tingling and prickling, as if recovering from cold. Eleven, A.M. Fits of vertigo not so frequent, but more decided; worse on sudden motion and bending forward. One, P.M. Vertigo only when stooping. Two, P.M. Vertigo all gone, but head feels a little muddled. Took six drops; no symptoms.

February 24, noon. — Seven drops. No symptoms. Half past five, P.M. — Ten drops. Six, P.M. Dull, heavy, passive pain around the umbilicus, with a fine, active pain above umbilicus, across the abdomen; relieved by pressure. Seven, P.M. No symptoms after supper.

February 25, nine, A.M. — Ten drops. Eleven, A.M. Dull, constant, heavy pain in the umbilical region. Abdomen feels hollow, empty, caved in. Took ten drops. No symptoms.

Three, P.M. — Fifteen drops. No symptoms.

Second Proving.

April 15, 1867, nine, A.M. — Took five drops of the mother tincture. Ten, A.M. — Fifteen drops. Eleven, A.M. Felt languid and lazy; had no inclination to stir; aversion to all muscular exertion; constant nausea, and feeling of uneasiness in umbilical region; abdomen felt caved in. Sensation of softness in abdomen, and as if its front walls were drawn in towards the spine; dull, heavy pain in umbilical region. Abdomen weak, lax; sick; wanted to be let alone. Pulsations in umbilicus isochronous with those of the heart. One, P.M. Symptoms gone.

Three, P.M. — Took ten drops. At half past four, P.M. — Fifteen drops. Five, P.M. Dull, heavy, aching in region

of umbilicus; abdomen feels caved in, with sense of heat; general feeling of muscular weakness; inclination to avoid all exertion, mental and muscular; sensation as if the nervous system were resting; flushes of heat in abdomen. Half past five, P.M. Prickling numbness in hands; sensation as if they were cold, and larger than usual. Six, P.M. Feeling in hands like that produced by electricity. Symptoms in the abdomen nearly gone. Nine, P.M. Beating in abdomen; tingling in hands and fingers; head feels light; mind confused; intolerance of loud talking. A voice usually pleasant sounds very coarse and rough; thought that it would produce spasms if he were obliged to listen. Impression produced by the sound heard last continues a long time.

April 16, half past five, A.M. — Ten drops. Ten, A.M. — Fifteen drops. No symptoms.

April 17, nine, A.M. — Twenty drops. Noon. — Twenty drops. In half an hour, a feeling of warmth in abdomen and stomach; dull pain in abdomen; general feeling of intoxication. Brain seems agitated, mind confused, pupils contracted; sensation as if all objects were in violent agitation; nothing seems to be at rest. One, P.M. Symptoms all less marked. Three, P.M. — Symptoms gone. Took twenty drops; no symptoms.

Proving discontinued for want of time to attend to it.

Remark. — The above proving, though not very satisfactory to the prover, was not spun out, and made up from imagination. No symptoms were given but those well marked, and which could not reasonably be attributed to any cause but that of the drug.

C. H. L.

PROVINGS BY C. W. PIERCE, M.D.

Prover in good health, but having from birth a tendency to unnatural desquamation of the skin.

First Proving.

Nov. 12, 1867, nine, P.M. — Took ten drops, mother tincture, in one ounce of water. Slept well until two, A.M., when he awoke, dreaming of fighting.

Nov. 13, seven, A.M. — Ten drops. Nine, A.M. A sharp, darting pain through upper lobe of left lung, lasting only a short time, but returning every half-hour; aggravated by descending stairs; did not feel it after the first day.

Noon. — Ten drops. Appetite very good. A feeling of mental uneasiness, wandering from one subject to another.

Nine, P.M. — Ten drops. Was quite hungry, but did not eat very heartily. Had most frightful dreams; dreamed of getting whipped, and killing snakes.

Nov. 14, seven, A.M. — Twenty drops. Had an abnormal appetite, but his food did not distress him. After eating, a feeling of liveliness and activity for one hour; next hour, gradual passing off of cheerfulness, amounting to sadness, and a disposition to be displeased with everybody and everything. Could not concentrate his thoughts. Soreness and weariness in lower extremities.

Noon. — Took twenty drops. One, P.M. Felt a sharp, darting pain through left superciliary ridge, extending deep into the head, lasting but a short time; would return at intervals, whether in motion or not. A prickling in lower extremities, almost like that of pins, mostly in popliteal space; on scratching, it burns like fire, but no change in color of the skin.

Nine, P.M. — Twenty drops. Dreamed as before. Had a dull, heavy headache in frontal region; burning in the skin of lower extremities like fire. Could get more relief from rubbing than scratching.

Nov. 15, seven, A.M. — Sixty drops. Feeling, as before, of liveliness after eating, followed by great depression of spirits. Red spots on lower extremities, alike in position on both; after

an hour or so, they would change to a purple color; there would be no itching quite near or on the spots, but around on the healthy skin. Weakness and depression all over the body, especially in lower extremities.

Noon. — Took sixty drops. Felt all the afternoon as though he would break out into a profuse perspiration, but did not. Bright-red spots in various parts of the body, changing as before to a purple color.

Ten, P.M. — Sixty drops. Could go to sleep quite easily; was able to sleep only a short time, awaking from horrible dreams, and covered with a profuse perspiration. Itching was not so annoying while perspiring.

Nov. 16, seven, A.M. — One hundred drops. One hour before breakfast counted as many as fifty spots on various parts of the body, most of them on upper and lower extremities; one or two on the chest. Itching more confined to the trunk. Discontinued the use of the drug for two weeks, during which time the itching continued as annoying as ever. By getting in the least degree excited or warmed, the spots would be as red as ever, but in an hour or so would subside and assume a purple hue. After the expiration of two weeks, could see where the spots had been. The itching was as annoying as ever; it did not produce any disorganization of the skin. As the spots disappeared, they became of a dirty-yellow color, somewhat like that left by a bruise. Appetite remained quite good for two weeks.

Second Proving.

Nov. 30, 1867. — Took ten drops of the first dec. dil. three times a day for three days. Did not get any prominent symptoms, and discontinued the use of the drug.

PROVING BY MRS. W.

Reported by Dr. Pierce.

Prover aged thirty-five; of a bilious temperament; took the drug for three days.

Nov. 12–14, inclusive.—Three times per day. The first day, ten drops at a time; second day, twenty; third, sixty. It occasioned quite an irritation of the skin, but not the peculiar spots manifested in the preceding case. The itching was so intense all over the body that she could not be induced to continue the proving longer. She described it as so many thousand fleas on her; could not refrain from constant scratching. The itching was not worse at night. The drug did not seem to have any other effect upon her.

PROVINGS BY A. V. MARSHALL, M.D.

First Proving.

To one hundred grains of sugar-of-milk, on which Prof. Hale had dropped one hundred drops of the tincture, the prover added one and a half ounces of alcohol. Of this solution he took a dose four times a day, commencing with three drops and gradually increasing, till, at last, he took drachm doses, until the preparation was all gone. No symptoms could be found.

Second Proving.

He then waited four days and commenced taking the first decimal trituration, in three-grain doses, four times a day, gradually increasing the dose to fifteen grains, when fifty grains (all which Dr. Hale had sent) were exhausted. During the last three or four days, there was a peculiar reddish-clouded appearance of the skin over the whole body. Aside from that, he remained perfectly healthy, taking his usual meals without tea or coffee.

Bowels continued to move once a day, as usual; would not have known from his feelings that he had taken any drug. Two

days after discontinuing the drug, the clouded appearance of the skin disappeared.

Third Proving.

April 13, 1867.—Took one scruple of Ptelein, one-fifth, at three different times on an empty stomach, and continued to take it in the same manner for four succeeding days. Felt as well as usual till evening, when suddenly had a severe urging to stool; it was very loose and dark-colored. The diarrhœa did not continue.

April 14.—Bowels regular.

April 15.—No symptoms.

April 16.—Rose with a dull headache, which wore away after an hour or two. Had dreamed of armies of soldiers rising out of their graves, and marching into the house. Bowels regular. Occasional pains in various parts of the abdomen throughout the day. Went to bed at half past eight, P.M. Dropped to sleep, and at nine o'clock was awakened by a painful urging to stool; it proved to be another attack of diarrhœa; quantity small, but with much pain throughout the bowels.

April 17.—Dull headache in morning. Had dreamed of enemies prowling about the house. Felt a soreness about the abdomen, aggravated more by bending the body in any direction than by pressure. The soreness or heaviness of the bowels is such as to incline him, when sitting or walking, to support the abdomen with the hands, indicating a moderate degree of congestion of the abdominal viscera. Appetite about the same as usual, except that he gets tired before he gets through eating. Yesterday the tongue was slightly swollen, and had white fur on it; more of swelling and fur to-day, with burning of the mouth and lips as if touched with tincture of Aconite. After taking the drug, had sour stomach and a dull, heavy pain, extending around the small of the back.

April 18. — Rose with a headache; brassy taste in mouth; stomach sour; bowels costive, and not so sore as yesterday. The soreness or lameness of the lumbar region is worse. Same doses. Pain in the lower part of each lung in the evening.

April 19. — Rose with a headache and general soreness of the body, and wandering pains about the limbs. Pain in lumbar region most of the time, and sometimes in the right hip.

April 22. — Symptoms similar to those on the 19th, except there is less energy and less appetite.

April 25. — The symptoms have gradually worn away.

May 1, 1867. — For some days has felt free from the influence of the drug. Has no acquaintance with it, except from these provings. Would think it might be of use in treating certain rheumatic cases in aged people, in which there is a general soreness of the body and limbs; and especially of the abdominal and lumbar regions, with alternate diarrhœa and constipation. Possibly it may be of use in some forms of skin disease.

PROVING BY E. PARSONS, M.D.

Jan. 12, 1867, ten, A.M.—Commenced the proving by taking fifty drops of the tincture. Noon. — Took fifty drops. After this, experienced slight nausea and giddiness. Sharp, darting pains through the forehead and temples.

Half past two, P.M. — Fifty drops. Half past three. Confusion of ideas, and drowsiness.

Half past four, P.M. — Fifty drops.

Jan. 13, nine, A.M. — Fifty drops. Ten, A.M. A severe pain in the region of the heart, lasting several minutes. Eleven, A.M. Severe pain in the left leg, three inches below the knee. Half an hour after, severe darting pain in the right temple, and throbbing pains in the left supra-orbital region. Fifty drops at half past one, half past five, and at nine, P.M. Retired about half past ten. Severe, sharp, darting pains in the right thigh;

pains seemed to be muscular, and lasting for several minutes; also severe darting pains through forehead.

Jan. 14. — Before rising, felt pricking pains through and in the throat, particularly in the tonsils and larynx, lasting several minutes, and quite severe; roaring in the ears. Half past eight. — Fifty drops. Extreme lassitude; disinclination for mental labor or bodily exertion. Heaviness of the head, with a muddled feeling, and dull, aching pain in forehead. Took fifty drops at ten, A.M., at noon, and at two, P.M. Giddiness, dullness, and languor.

Four, P.M. — Fifty drops. Soon after this experienced severe darting and throbbing pains in the left supra-orbital region.

Eight, P.M. — Fifty drops, soon followed by a sensation as if diarrhœa would come on. Sleep heavy, and troubled with dreams of robbers, &c.

Jan. 15. — Took fifty drops at nine, A.M., noon, and three, P.M. Extreme lassitude. Pain in left lung, lasting for several minutes. Roaring in the ears. Disinclination for mental labor. Severe darting pains just above the supra-orbital ridge.

Six, P.M. — Fifty drops. Severe darting pains in right temporal region. Half past nine. — Fifty drops. Pain in carious tooth, with extreme sensitiveness; soreness of the gums. All the teeth feel sensitive, with a dull, aching pain. Pulse 85, regular, full; normal pulse 75. Ten, P.M. Pain and rumbling in bowels, as if diarrhœa would supervene. Severe frontal headache. The pain throbbing. Half past ten. Pain and rumbling in bowels, with copious evacuation. Chilliness, with great sensitiveness to cold air, and desire to be near the fire. General feeling of *malaise*, with aching in the lower extremities, and premonitory symptoms of fever.

Jan. 16. — Took fifty drops at nine, A.M., noon, three and seven, P.M. Felt very badly all day. Dull, aching pain through forehead and temples; roaring in the ears; severe pain in the lower extremities, worse on standing. Weakness, with disinclination to move or study; chilliness, and extreme sensitiveness

to cold air. Pulse 85. Urine scanty, with copious deposit of phosphates and epithelial scales. Sp. gr. 1035.

Jan. 17. — Fifty drops at nine, A.M., noon, three, five, and seven, P.M. — Felt better this morning, but in the afternoon felt quite badly again, with pain in the forehead and temples, aching in the limbs, dullness, drowsiness, and incontinence of urine. Sp. gr. 1035. A free deposit of phosphates. Constipation. Pulse 80.

Jan. 18. — Fifty drops at half past eight and eleven, A.M., two and six, P.M. Felt better in the morning, but in the afternoon and evening much worse again. Pains to-day worse in the right side. Pains in the right leg, below the knee, extending to the ankle. Dull, aching pain in the small of the back. Pain in right zygoma, and in the right temple; also in the forehead. Nose stuffed up; sneezing; soreness of nasal passages; influenza. Pulse 80. Urine frequent, rather scanty, some scalding, and difficulty of retention. Sp. gr. 1030. Deposit less copious.

Jan. 19. — Fifty drops at nine, A.M., noon, and four, P.M. Felt much better to-day till half past four, when the pains of the extremities, back, and head all returned. Pains in head quite severe at half past nine, P.M. Pulse 84. Urine scanty during the day; the scalding and difficulty of retention all gone. Sp. gr. 1030.

Jan. 20. — Took no medicine. Feel some better. Catarrhal symptoms still continue, but less violent. Pain in the head, limbs, etc., not so severe. Urine slightly alkaline; copious deposit of phosphates and urates, tinged with purpurine. Sp. gr. 1035.

Jan. 21. — Awoke about two, A.M., with severe pains in forehead, roaring in the ears, and very severe pain in right kidney. Very restless and uneasy, rolling and tossing about. Could not get to sleep for a long time, from pain and restlessness. In the morning felt some better. Pain in kidney relieved. Slight

pain in the head, and roaring in the ears, which increase in severity towards evening. In the evening, while riding on cars, had a severe pain in right forearm, lasting several minutes. The pain seemed to be in the flexor muscles of the forearm.

This ended the proving; all the unpleasant symptoms gradually disappeared, and at the end of a week he felt as well as usual.

Remark. — The prover was naturally of a costive habit, and was costive when he commenced the proving. But, after taking the drug, the bowels moved regularly every morning, without any particular uneasiness, for two or three days, when symptoms of diarrhœa came on, which, however, amounted only to one thorough operation as from cathartic action. After this the bowels became constipated again, there being no movement for two or three days at a time.

The appetite was much increased for the first few days of the proving, after which it diminished. No particular loathing of food, but rather an indifference to it.

The sexual appetite was very much increased for several days, after which there was a total absence of sexual excitement, until the medicine was discontinued.

PROVING BY A. HAYWARD, M.D.

Prover, aged thirty-seven, nervo-bilious temperament, health good.

April 17, 1867, eleven, A.M. — Took two grains of the third decimal trituration, and again at three, P.M.

April 18.— Sleep natural. No symptoms. Took doses of two grains, at six and ten, A.M. Frontal headache. Two, P.M. —Two grains. Dull headache throughout the head. Six, P.M. —Two grains. Severe pains in forehead and occiput.

April 19.—Slept well. Very little pain in the morning. Four grains at nine, A.M., and again at two, P.M. Head nearly free from pain. Nine, P.M.— Four grains. Not much headache.

April 20. — Very little headache; sleep natural. Doses of six grains at six, ten, two, and six, P.M. Symptoms unchanged.

April 21. — No symptoms. Doses of ten grains at eight, A.M., noon, and four, P.M.

April 22. — Doses of fifteen grains at eight, A.M., noon, four, and nine, P.M. No symptoms.

April 23. — Doses of fifteen grains at six and nine, A.M. No symptoms. Two, P.M.—Frontal headache. Fifteen grains; and again at five, P.M.; slight ptyalism and headache.

April 24, six, A.M. — Slight ptyalism and headache. Twenty grains; again at ten, and at three, P.M. Ptyalism, but head nearly free from pain. Slight burning in throat and stomach.

April 25. — Doses of twenty grains at eight, eleven, A.M., three, six, and nine, P.M. No symptoms during the day, except slight ptyalism and a little dull headache.

April 26. — Doses of twenty grains at six and ten, A.M., and three, P.M. Headache and slight sickness at stomach.

April 27 to 30. — Took doses of twenty grains four times a day, about three hours apart. No symptoms, except slight headache and ptyalism. Tongue smarts and prickles, and burns a little.

May 1 to 4. — Took daily four doses of twenty grains, three hours apart. No symptoms.

May 5 to 11. — Took daily three doses of twenty grains four hours apart. No symptoms.

May 12. — Two doses of two grains, first dec. trit., six hours apart. No symptoms.

May 13. — Doses of two grains at six and nine, A.M., three and six, P.M. Slight salivation. Out of medicine.

PROVING BY G. C. HUNTER, M.D.

Prover 45 years of age; temperament bilious, nervous, and lymphatic, — bilious predominating; weight one hundred and ninety-five pounds; slightly dyspeptic.

April 19, 1867. — Took five doses of thirty drops each of the saturated tincture of the fresh root, commencing at half past ten, A.M.

April 21. — Took six doses of thirty drops each.

April 22, eleven, A.M. — Took eighty drops, which was all he had prepared. He took in all four hundred and ten drops. Could not say that he felt the slightest unusual symptom during the time or since. Concluded that either his tincture was worthless, or that he was not a good subject for proving it.

CLINICAL OBSERVATIONS ON PTELEA.

PTYRIASIS VERSICOLOR. A middle-aged man was covered with this eruption on all parts of the body except hands and face. He had all the usual characteristics of the disease. He had tried Arsenicum, Kali iod. and Sarsaparilla, with no good results. Ptelea, second dil., ten drops three times daily, cured the case in six weeks. E. M. HALE.

CHRONIC GASTRITIS.—A middle-aged woman had for several years a constant sensation of corrosion, heat, or burning in the stomach; occasional vomiting of ingesta, constipation; fever every afternoon; lowness of spirits, and debility. She had taken Nux vom., Carbo veg., Phosphorus, and several other remedies, with only temporary benefit. Ptelea, second dil., ten drops in a spoonful of water before each meal, effected a permanent cure in five weeks. P. H. HALE.

ERYSIPELAS.—Two cases of erysipelas came under my treatment, in which quinia and iron had been used in large doses without success, and rather with injury to the patient. A rapid recovery ensued after the use of Ptelea. DR. MILLER.

ICTERUS, WITH HYPERÆMIA OF THE LIVER.—In severe cases of this disease, I have found Ptelea an excellent remedy. Ptelea primarily affects the liver; the stools are generally of a brown or gray color, with considerable odor. DR. MILLER.

ASTHMA.—In two cases of asthma, Ptelea was of more service than any other remedy. DR. MILLER.

ASCITES.—I found Ptelea to cure a case of ascites of very severe type after many agents had been employed without success. DR. MILLER.

PHTHISIS.—Several cases of hectic fever, with purulent expectoration of a sweetish taste, but without any other chest symptom than a slight mucous rhonchus, and sibilant râle, were cured completely with Ptelea. DR. MILLER.

RESUME OF PTELEA TRIFOLIATA.

[*Explanation of Symbols.*—(·) A pathogenetic symptom not confirmed by clinical experience. (*) Confirmed by clinical experience. (o) Curative, but not observed as pathogenetic. (v) Verified by one or more other provers. The symptoms in *Italics* denote the *persistence* of a symptom in all the provings. *With* in Italics couples symptoms of two classes.]

MIND AND DISPOSITION.

1 · *Great languor* and *indisposition* for either mental or physical labor (vvvv).

· Malaise of body and mind (vv); desire to lie down and think of nothing at all.

· Inability to concentrate the thoughts; they seem chasing each other through the brain.

· Complete incapacity for mental exertion, with headache (vv).

5 · Fretful and irritable at very slight causes (vv).

· Compelled to give up any attempt at exertion in P.M.

· *Performed his duties in a perfunctory manner.*

· *Great mental confusion* (vv).

· The mind moves slowly and heavily; with difficulty in remembering familiar things.

10 · Extraordinary weakness of memory; inability to recall familiar names.

· Peevish, irritable feeling, and intolerance of noise (v).

· *Marked forgetfulness*, with increased headache, and disposition to hurry when writing.

· Great forgetfulness, and yet an ability, on collecting the thoughts, to recall things read many years ago.

· Confusion of thought, with hurriedness of manner; forgetfulness, with mistakes in writing. (From a large dose.)

15 · Sick and faint (v); desire to shrink from any mental work.

· Dull and stupid feeling (v).

· Great depression of spirits, *with* sour stomach.

· Aversion to society; a wish to be let alone (v).

· Annoyance and irritation from ordinary conversation (v).

20 · Liveliness for an hour after eating, followed by great depression and sadness.

HEAD.

· Pressive feeling at the base of the brain, with nausea, closely resembling the Ipecac symptom; "Headache as if the brain and skull were bruised, penetrating through all the bones down to the root of the tongue, with nausea."

· Frontal headache all day (vvvv); pressing from within outwards.

· Pressive pain in the frontal region, extending to the roots of the nose, as if a nail were driven into the brain (left side).

· Piercing pain shooting through the temples (vv), *with* increased headache and nausea.

25 · Splitting headache, *with* nausea.

· Piercing pain in the brain, *with* giddiness, and severe aching pain in the stomach.

· Headache after dinner, aggravated by mental exertion.

· Sharp, cutting pains through the front of the brain, alleviated by pressure.

· *Racking frontal headache*, with heat of the face and head, and great desire to hurry his business.

30 · Heaviness in the occiput, with a gloomy feeling in the forehead.

· Heavy, pressive frontal headache, worse at night, pressing from within outwards, and aggravated by stooping.

· Stunning, pressing headache (a similar one was cured by Rhus).

· Head feels languid and heavy, with inability to follow a connected train of thought.

· Persistent headache, with sharp pains shooting from the frontal to the left parietal region.

35 · Frontal headache, aggravated by moving the eyes, and by noise.

· Frontal headache deep in the brain.

· Sudden, pressive pains in the temples, worse in the right (vvv).

· Fine, neuralgic pains in the temples, worse in the right.

· *Constant dull headache* (vv), aggravated by going upstairs, and by walking.

40 · Sharp, darting pain over the left eye, extending deep into the brain.

· Throbbing pains over the eyes, from right to left.

· Shooting pains in the head, before rising in the morning (vv).

· Throbbing pains over the temples, from left to right.

· Severe throbbing headache on rising, with great weakness.

45 · Dull, frontal headache, with depression and sour stomach.

· Headache intermitting with pain in the hypogastrium, dizziness, and nausea.

· Pain in the left side of the head and right side of the neck.

· Headache over the eyes (v).

· Sudden pressive pain in the temples, as if they would be pressed together, or as if the right would be pressed to the left (frequently recurring during the proving).

50 · Frontal and occipital headache (vvv).

· Headache while reading (v).

Sensorium.

· Giddiness on rising in the morning.

· Giddiness, with continual vertigo and increased abdominal tenderness.

· Giddiness of the head, and, when walking, reeling as if intoxicated (vv).

55 · Giddiness and vertigo in A.M., so as to necessitate a recumbent posture.

· Severe attack of vertigo, with increased headache, and aggravation of all the symptoms.

· Sudden giddiness, with faintness on turning the head; vertigo aggravated by even a gradual turning of the head.

· Vertigo and nausea, aggravated by rising to the feet, also by walking; inability to stand without the aid of a chair.

· Vertigo and confusion too severe to permit letter-writing.

60 · Sudden atttack of vertigo, lasting a minute.

· Everything seemed to be in violent agitation.

Eyes.

· Twitching of the eyelids.

· A shooting pain over the eyes when startled.

· Nervous twitching of the upper lip, extending to left eye.

65 · Nervous pain, extending from the left arm to left eye.

· Rolling the eyes upwards aggravated the frontal headache.

· Pressure over the eyes, aggravated by lifting the eyebrows.

· Heavy feeling over the eyes (v).

· Pain in the eyes (v).

70 · Pupils contracted.

· Painful sensitiveness to light, with irritability.

Ears.

· Ringing in the ears, with slight giddiness.

· Sensitiveness to sounds (v); impression of sounds last heard continues for a long time.

· Intolerance of noise, and of loud talking; annoyance at even ordinary conversation.

75 · Easily startled at unusual sounds.

· Pain in the right ear.

· Continuous pain behind the right ear.

· Intense throbbing pain in the ear, worse on motion.

· Itching of the right ear, with inflammation and swelling, terminating in white blisters on a red base, discharging a copious, watery fluid. (Occurred twice on the same spot.)

Face, etc.

80 · Burning heat of cheeks and face (v).

· Heat of head and face, especially of the forehead.

· Yellowish face, with dry, hot skin (v).

· Sickly paleness of the face, especially around the eyes.

· Pressure at the roots of the nose (v).

Mouth, Tongue, etc.

85 · Feverishness and dryness of the lips, with thirst. (Primary.)

· The lips cracked and sore, notwithstanding an abundance of saliva. (Secondary.)

· Burning, prickling sensation of the mouth and tongue.

· Much dryness of the lips and tongue, *with* hawking of mucous from the pharynx.

· Great dryness of the mouth, with bitter taste.

90 · Great dryness of the mouth and throat (v).

· Increased secretion of saliva of a saltish or bitter taste.

· Drooling in the night, wetting the pillow.

· Fine prickling sensation over the whole surface of the tongue (vvv).

· Tongue coated with a yellowish fur; the papillæ red and prominent.

95 · Tongue dry and brownish-yellow, or light-brown (v).

· Tongue swollen (v), and furred; white.

· Tongue coated yellow along the centre and base (v).

· Tongue feeling as if it had been cut through the middle and was now healing up.

· Tongue feeling as if scalded, or as after taking Aconite.

100 · Tongue inflamed (vvv), but not swollen.

Jaws and Teeth.

· Dull, aching pains in all the teeth.

· Teeth all feel sore, *with* increased secretion of saltish saliva.

· Pain in the right molar teeth; first lower, then upper.

· Teeth feeling elongated, and as if something was crowding them apart.

105 · Pain when moving the jaws.

Throat.

· Roughness of the fauces, with nausea (v).

· Sensation as of a foreign body in the larynx.

·Slight vertigo, *with* a choking feeling in the pharnyx (at evening).

·Soreness and inflammation of the fauces (vvv), soft palate, and uvula (worse on right side).

110 ·Throat ulcerated and tongue inflamed (right side).

·Distressing feeling of emptiness in the œsophagus.

·Slight burning in the throat and stomach.

·Hiccough.

·Sense of obstruction in the larynx on waking.

115 ·Great hoarseness; inability to speak aloud (vv).

Taste and Appetite.

·Appetite increased (vvvvv). (Primary.)

·Unusual hunger; craving for acid food.

·Voracious appetite; food had not its natural taste; *with* pain in epigastrium following every meal; despondency.

·Appetite poor (vvvv); but little appetite and no thirst.

120 ·Bread seemed tasteless; all other food tasteless or unnatural.

·Great repugnance to animal food; and to rich puddings, of which he is ordinarily fond.

·*Great repugnance to butter* and fatty foods; even a small quantity aggravated the epigastric pain.

·Disgust at the sight or smell of food, especially of roast beef.

·The taste of the medicine continually returning in gusts to the mouth, with a feeling as if vomiting would relieve.

125 ·Very little appetite (vv), with great repugnance to butter.

·Eructations tasting of the medicine, with persistent nausea (v).

·Eructations tasting of rotten eggs.

·Sour eructations (vvv).

·Frequent bitter taste in the mouth (vv), with dryness.

130 ·Taste of brass on rising in the morning.

Gastric Derangements.

·Slight but persistent nausea (vvv).

·Nausea and retching, *with* increase of frontal headache; aggravated by speaking.

·Severe nausea, with efforts to vomit, for two minutes.

135 ·Sensation of goneness, or an empty feeling in the stomach after eating.

·Nausea, with distress in the umbilical region, and headache (vv).

·Increased nausea, with heat of skin and profuse perspiration on the forehead (vv), after dinner.

·Sensation of repletion and fullness after a meal.

·Nausea and vomiting, without relief from the frontal headache (vv).

140 ·*Persistent nausea* (vvvv) and vomiting, *with* giddiness and unsteadiness of the legs; aggravated by walking (v).

·Awakened at one, A.M., by a pressing pain in the stomach, as of a weight; aggravated by motion and pressure, accompanied with eructations of a bitter fluid, with deathly nausea, confusion of head, and sweat on the forehead. (The attack lasted four hours, and resembled acute dyspepsia.)

·Eructations, which almost caused emesis (after stool).

·Griping in the epigastric region, *with* dryness of the mouth, yellow-coated tongue, and a bitter taste (v).

·Eructations of bitter fluid, with deathly nausea.

145 ·Colic, with emission of flatus, and borborygmus (vv).

·Emission of flatus, relieved by motion.

Remark. — All the gastric symptoms were much aggravated after meals.

Hepatic Symptoms.

• Sharp pains in the right hypochondrium (vv).

• Constant feeling of weight in both hypochondria when walking; a dragging pain (vv).

• Sharp, cutting pain in right hypochondrium, aggravated by a deep inspiration (while in bed).

150 • Occasional pains in right hypochondrium, shooting downwards (v).

• Dull, heavy pain, apparently on the convex surface of the liver.

• Liver perceptibly swollen and sore on pressure, causing a dull, aching pain, with stitches.

• Awakened by a dull, heavy pain in the liver, relieved by lying on the right side. A feeling, when lying on the left side, as of the liver dragging on its ligaments.

• Liver swollen, and tender to a light touch.

155 • Heavy, aching pain in the liver, *with* deficient appetite.

• Sharp pains in the right hypochondriac and epigastric regions, caused by rapid motion.

• Awoke with hard, aching distress in the base of the liver (v).

• Hepatic and gastric symptoms, aggravated towards morning, awaking the prover at four o'clock.

° Tertian ague, with profuse vomiting of bilious matters.

160 ° Attacks of quartan ague, continuing for two years, resisting many remedies.

Stomach and Abdomen.

• Tenderness of the splenic region, with soreness on pressure (vv).

• Abdomen swollen and tender, with severe splenic pain (vv).

• Severe abdominal pain near umbilicus (vvv). Worse on motion.

• Sharp stitch proceeding from the umbilicus towards the spine when taking a deep inspiration, with increased tenderness on pressure.

165 • A faint feeling in the stomach, with sourish eructations (v).

• A squeezing pain in the epigastrium, worse in bed, with swollen but not painful abdomen.

• Aching of the bowels while walking (v).

• Throbbing, griping pains in the epigastrium, aggravated by a full, deep inspiration, by speaking, and by pressure, causing nausea.

• Pain and soreness across the abdomen, and in the epigastrium (vvv), aggravated by standing or sitting erect, and relieved by stooping forwards.

170 • Rumbling in the umbilical region, and swelling, with slight vertigo, and sweat on the forehead.

• *Rumbling in the bowels* (vvvv), and bloating, *with* tenderness on pressure.

• Burning and qualmishness at the stomach, *with* pain on pressure.

• Griping, contractive pain in the stomach, moving downwards (v).

• Griping, worse on pressure, in the bowels, *with* rumbling and bloating.

175 • Pressure as of a stone at the pit of the stomach (vv), aggravated by a light meal.

• Colicky pains in the small intestines (during the evening).

• Flying pains in the abdomen, with desire for stool.

• Stomach feels empty after eating; a sensation of "goneness" (v).

• Severe aching distress in the left hypochondrium (vv).

180 · Frequent drawing pains in the epigastric and umbilical regions (vvv).

· Stitches in the abdomen, relieved by pressure (v).

· Pain in the epigastrium, *with* nausea (vv).

· Severe pains in the left iliac region, changing to the right; worse on motion.

· Severe, bearing-down pains in the bowels; spasmodic and griping, or sharp and throbbing.

185 · *Pain in the hypogastrium* (vv) and bladder, *with* headache, intermitting during the paroxyms.

· *Retraction of the abdomen* (vvv), *with* pulsations isochronous with the heart.

· Soreness of the abdomen, aggravated by motion, and relieved by carrying it with the hands (vv).

· Abdomen tender on pressure for three weeks after the proving.

Stool and Anus.

· Sudden and unexpected urging to go to stool, which was diarrhœic, with slight tenesmus, accompanied by sweat on the forehead and head (vv).

190 · Urging before stool, *with* straining during a diarrhœic stool.

· *Constipation* (vvvv), with a continual urging in the rectum.

· Constant urging to stool, with rumbling in the bowels all day (vvv).

· *Small, hard stool,* with much straining (vvv).

· Hard and difficult stool, followed by smarting of the anus (vv).

195 · Stools of usual consistence, with slimy coating, accompanied with straining and vertigo.

· Involuntary discharge of flatus, with ineffectual urging to stool.

· Urging to stool, with difficult passage of balls of hardened fæces.

· *Constant ineffectual urging to stool; a continual pressure in the rectum* (vv).

· Pressure in the rectum all day, resulting in the discharge of a small stool of indurated fæces, with slight relief; apparently a true torpor of the rectum.

200 · Pressure in the rectum, with qualmishness, aggravated by motion. (From a dose of five hundred drops. See, also, the next five symptoms).

· Violent urging, followed by a stool of fluid consistence and fetid smell; the passage accompanied with chilliness and shivering; and, after this, renewed tenesmus.

· Urging to stool, and sudden copious discharge of thin diarrhœic fæces, of a cadaverous smell, *with* smarting of the anus.

· Pressure in the rectum, as in dysentery, not relieved by a stool.

· Two stools in succession of fæces coated with mucus, followed by *tenesmus;* during stool, shuddering and chilliness of sacral region; after stool, smarting of the anus, with itching.

205 · Copious stool of fluid consistence and bilious smell; with it was a very copious expulsion of ascarides.

· Diarrhœic stools of a dark color, and sulphurous smell.

· Distress in the small intestines before stool.

· Mushy stools.

· Dark-colored, lumpy stools.

Sexual Organs, — Male.

210 · Intense throbbing pain in the glans penis, extending into the pubic region, when retiring.

· Increase of sexual desire at night.

· Lascivious dreams in the morning.

Sexual Organs, — Female.

· Catamenia two days too early, and quite copious (after continued exertion).

Urinary Organs.

· *High-colored urine* (vv).

215 · Urine of a deep color, and scalding slightly during its passage (v).

· Urine high-colored; the yellowish-red of Neubauer and Vogel.

· Urine redder than usual during the whole proving (v).

· Urine scanty, and of a deep-reddish or reddish-yellow tint, during the whole proving.

· Urine less, with a reddish, cloudy sediment.

220 · Urine profuse, and of a light color; the quantity decreased and then increased during the proving.

· A deposit of muddy sediment in the urine; afterwards whitish, with increase in quantity.

· Pain in the region of the bladder, with headache intermitting.

· Pain in the stomach and bladder.

· Uneasiness in the bladder and prostate gland; obliged to rise in the night to urinate.

225 · Pain in the prostatic region.

· Tickling and uneasiness in the urethra after urinating.

· Smarting sensation in the urethra while urinating.

· Burning in the urethra.

Remark. — The quantity of urine increased each day, and afterwards slightly decreased (during two provings). The condition of the kidneys improved by the proving.

Respiratory Organs.

· Aching pain, *with* occasional stitches, in the region of the diaphragm.

230 · Stitches in the diaphragm, arising from continued speaking.

· Stitching pains in the upper part of the posterior mediastinum, aggravated by breathing or a recumbent position, and accompanied with soreness of the trapezius muscles.

· Pressure on the lungs, with a sense of suffocation.

· Uneasiness and difficulty of breathing, coming on as the gastric and hepatic symptoms declined; with dull pain especially in the right infra-clavicular region, accompanied by —

· Hacking cough, without expectoration. This has approached very insidiously, and now —

235 · The right lung is dull on percussion at the apex.

· During a full inspiration, sharp pains shoot from the sternum towards the nipples; worse on the left.

· Pressure on the intercostal spaces, close to the sternum, causes a dull, aching pain.

Remark. — These thoracic symptoms are better in the house, and aggravated in the keen air. (Secondary.) By T. N. from the tincture.]

· Cough, with bursting headache, in the morning.

· A sharp, darting pain through the upper part of left lung; frequently returning, and aggravated by stepping downwards.

240 · Pain in the lower part of each lung, in the evening.

· Stitches through the right lung, which is sound.

· Pain back of the left breast, near the axilla.

· Pain under the right breast.

· Cramp-like pain in the cardiac region (v).

245 · Dyspnœa; the walls of the chest feel as though they would sink in (vv).

Back and Neck.

· Severe aching in the lumbar and sacral regions (vvvv).

· Dull backache every morning on waking (vv).

· Hard, aching distress in the dorsal region, for an hour in the morning (vv).

· Pains in the left scapula, aggravated by the exertion of writing.

250 · Bruised sensation in all the limbs and back; worse on pressure.

· Rending, tearing pains in the left scapula.

· Drawing, aching pains in the left scapula and shoulder-joint (vv).

· Dull, aching pain in the small of the back, aggravated by motion.

· Severe pains in the back, worse in dorsal region, disturbing sleep.

255 · Awakened by aggravated pains in the lumbar region.

· Hard backache the whole length of spine and back of the neck, also through the right shoulder.

· Walking arrested by a cramp-like pain in the left sacral region.

· Lameness in the cords of the neck, right side.

· The whole neck feels swollen.

260 · Dull, heavy pain and soreness in the lumbar region.

Upper Extremities.

· A tingling, prickling in the hands and fingers, like that produced by electricity (vv).

· A prickling numbness in the hands, which seem larger than usual and clumsy (vv).

· Fine, sharp pains in the fingers.

· Dull, aching distress in the hands and fingers.
265 · Hands and feet are hot, dry, and feverish (vv).
· Hands and fingers cold, numb, clumsy, and stiff (vv).
· Dull pains in the elbows and wrists.
· Frequent drawing pains in the right elbow-joint.
· Drawing pain in the left elbow.
270 · Sharp pains in the arms while in bed, in the morning.
· Rheumatic pains in the right leg and arm.
· Flying, nervous pain, alternating from the left arm to the left eye and parietal region.
· Stitches in the shoulder and hip.
· Wandering pains and soreness in all the limbs.

Lower Extremities.

275 · Aching pains in the back part of the thighs (vv).
· Aching drawing in the left ankle, aggravated by motion, extending up the calf of the leg.
· Rending pains around the left knee; flying, fugitive pains, which come and go rapidly.
· Legs weak, with drawing in the knees and flexor muscles.
· Constant aching distress in the calves of the legs (vv).
280 · Severe, aching distress in the legs all day.
· Hard, aching distress in the right knee all the evening.
· Aching distress in the knees, ankles, and toes.
· Sticking, penetrating pain in the left knee.
· A lame spot on the right knee.
285 · Throbbing pains in the left hip and gluteal region.
· Wandering pains in the limbs and right hip.
· Great weariness of the lower limbs, with trembling (vvvv).
· Drawing pains in the left heel.

SKIN.

· A peculiar reddish, clouded appearance of the entire surface of the skin, lasting two days (v).

290 · Red spots on various parts of the body, mostly on the extremities, soon changing to purple, lasting two weeks, with itching around the spots.

· Prickling, like pins, mainly in the popliteal space; itching and burning, like fire; alleviated by sweating.

· Itching and irritation all over, like flea-bites.

· Eruption under the right ear.

· A boil on the forehead. [The prover never had one before.]

295 · A slight bruise inflamed and suppurated.

· Vesicular eruption on various parts; burning and itching, aggravated by exposure to the air.

· Profuse night-sweats.

· Hot skin, *with* profuse perspiration on the forehead.

· Dry heat over the whole body, especially the palms of the hands and the face, with a feeling as if the prover had been up all night; feeling worse when the pains are worse.

SLEEP.

300 · Sleep sound, but haunted by frightful dreams (vv).

· Sleep deep and heavy; awaking with racking frontal headache, aggravated by rolling the eyes upwards.

· The sleep is broken and restless (vvvvv), and disturbed by frightful or annoying dreams.

· Frightful dreams, awaking in a profuse perspiration (v).

· Sleep restless, and disturbed by dreams and by drooling of saliva.

305 · Languid on awaking, and unrefreshed (vvvv).

· Nightmare (v).

· Dreams of fighting; of killing snakes.

· Dreams of seeing soldiers.

· Dreams of food.

310 · Dreams very vivid and lifelike.

· Sleep restless, dream-haunted, with pain in the liver on awaking.

· Sleeplessness almost total, from harassing pain in the back; worse in early morning.

· Excessive inclination to sleep during the day.

· Sleep restless and heavy, with fantastic dreams of practising medicine among Brobdingnagians and Liliputians.

315 · Languid and drowsy by day, with bitter taste in the mouth.

· Sleepiness, though he had felt unusually keen, and had enjoyed the full night's rest previous to taking the large dose (500 gtt.).

· Attacked with a kind of nightmare on being awakened at quarter past nine, P.M.; quite conscious, but unable to stir on account of a pressing weight on the stomach, and whole front of the body.

Fever, Pulse, and Heart.

· Flashes of heat, mingled with chilliness, all day. Pulse 88.

Cold chills running up and down the spine.

320 · Feverish heat, lasting all day, *with* pains in the limbs, and nausea (vv).

· Increase of the nausea after dinner, with heat of the skin, and profuse perspiration on the forehead. Pulse 96, small and hard.

· Hot, dry feeling on the body, with cold feet (v).

· Dry heat over the whole body, with sweat on the forehead.

· Chilliness and shivering over the whole body, in a

warm room; inability to keep warm at the stove (after taking five hundred drops).

325 · Pulse 104, an increase of 32 beats in fifteen minutes.

· Shivering in a warm room, *with* heat of the head; shivering over the legs from the hips downwards.

· Pulse 126, small and thready, seventy minutes after the large dose; shivering, with chattering of the teeth; scarcely comfortable near a large fire; but all the symptoms ameliorated in the open air.

· Shivering and horripilation, with eructations tasting of Ptelea.

· Aching distress in all the joints, with great languor (v).

330 · Very languid and faint, *with* flushed face and feverishness (v).

· Rheumatic, drawing pains in all the joints.

· Pulse 72, weak and fluttering.

· Pulse increased twelve beats, soft and weak.

· Pulse accelerated (vvvv) and intermittent.

335 · Hot and feverish all day (vvvvv).

· Hot breath, which seems to burn the nostrils.

· Hot flashes, *with* pain in the top of the head and in the eyes.

· Profuse night-sweats.

· Pulse slow, strong, and irregular.

GENERALITIES.

340 · A curious malaise, with such oppression and weakness at the stomach as to discourage all attempts at work.

· Great lassitude and weariness, with a disposition to hurry through duties (vvv).

· Extreme weakness of limbs, brain, memory, thought, and will (v), as if from a powerful and all-pervading disease.

· Aching of all the limbs, especially of the flexor muscles.

· A fine, violent agitation of all the muscles of body and limbs.

345 · Dullness, with weakness in upper limbs, extending to lower.

· Great languor and indifference to duties (vvv).

· Soreness of the whole body.

· Frontal headache during the whole proving.

· Rheumatic, drawing, or wandering pains throughout the body.

350 · Flighty, nervous pains in different parts of the body.

· Loss of energy (v); languor and depression of spirits (Primary).

· Unusual aches and pains all over the body, especially in the abdomen and head.

· Singing increases the nausea, and aggravates the headache, causing shooting pains from within outwards.

· Soreness and swelling of lymphatic glands under the right ear.

355 · Great restlessness and despondency.

· Irritability of the sensory nerves.

· An unusual energy to work (secondary).

Conditions.

The symptoms assume the form of a severe bilious attack.

All the symptoms suddenly disappear after eating sour things, as sour grapes, or sour apple-sauce.

All the symptoms are better in the cool, open air (primary).

The thoracic symptoms are worse in the keen air (secondary).

The symptoms are all aggravated in the warm room.

The gastric and hepatic symptoms are aggravated by pressure *after meals*, towards morning, and after eating cheese, rich pudding, butter, or any fatty food; but relieved by motion in the open air.

The nausea is aggravated by lying down, or by noise.

The pains in the head press from within outwards.

The headache is *worse* after eating, or from mental exertion, moving the eyes, noise, walking, going upstairs, stooping, or warmth, or during the night, while in bed; but alleviated in the cool, open air, or by pressure.

Predominantly aggravated in the warm room, after eating fatty food, when lying down, or early in the morning, from noise, or when stooping.

Predominantly alleviated in the cool, open air, when rising from bed, or during continued motion, and by the use of vegetable acids.

Directions. — From above downwards, from within outwards, mainly in the right side, or from right to left.

VIII.

A BRIEF HISTORY OF THE HOMŒOPATHIC MATERIA MEDICA.

BY S. B. BARLOW, M.D., NEW YORK.

THE Homœopathic Materia Medica now stands before the world peerless,—the noblest monument of human perseverance and discriminative skill which has as yet been permitted to cheer the heart of man. Having for its sole object the good — the highest, holiest good — of mortals, it may well lay most righteous claim to the highest commendation, if we may not say adoration, of the race, and challenge almost an equality in bounteous thanksgiving from mankind with that which is awarded to the system of moral healing, designed to elevate man from the ruin and degradation of sin, and place him on a plane "a little lower than the angels." Although yet in its infancy, and measuring its existence by a few decades of years, — a period only equal to the common allotment of human life, — it has already attained a growth, a perfection, and a usefulness which might well put to shame the panegyrists and apologists of the preceding schools, hoary with antiquity, but which are merely the shapeless, arbitrary, ill-assorted and cumbrous accumulations of many centuries. Homœopathy is in all its youthful freshness and growing vigor. It is based on a law of Nature, as old as Nature herself, and which will be as lasting. It can, with all propriety, boast of a symmetry in its growing perfections, and a power for good from its adaptation for the relief of suffering

humanity, which could not be predicated of any other system or collection of the appliances of the healing art, without mockery and absurdity. Already can it display an *apparatus medicaminum*, founded on an unswerving and unalterable law of matter, and able to lay just claim to immortality.

Time, which ever has displaced, and ever will displace, arbitrary systems, will never be able to abrogate or overturn this. It is based deep down upon everlasting foundations, and will remain as long as disease, the manifestation of violated laws of health, shall be found upon the earth: nay, it will usher in the glad day when pain, sickness, and death shall be banished from this fair heritage of God.

In 1786, Samuel Hahnemann, a true seer, discovered the connection between the pathopoietic and the therapeutic action of drugs upon the human body. Thus he laid the foundation of a method of curing disease, as simple and as efficacious as it is safe, pleasant, and beneficent. For the first time in the lengthened course of centuries was the old, insecure, and often dangerous and hurtful Galenic method replaced by one of a beneficence, safety, and efficacy which will ever be the theme of praise of mankind.

In 1790, Hahnemann first promulgated to the world the discovery which he had made in 1786. As a result of this publication by the master physician of the eighteenth century, the world of medicine was moved to its centre; the good were struck with awe and admiration; the bad with astonishment, culminating in opposition, detraction, and persecution. The good man was unmoved by the clamors and persecutions of his brethren, and went forward by the command of the Divinity within him, enlarging his views, perfecting his beneficent improvements; securing converts, friends, and collaborators in the noble enterprise of disenthralling his race from the shackles of a tyranny which had held the medical world in uninterrupted and almost unquestioned sway for twenty-five centuries. He

was unmindful of toil, of suffering, of opposition, of calumny, and of ignominy at the hands of his professional brethren, if so he might press forward to the finishing of his task,—a task which was to enroll his name with mankind's greatest benefactors, and which, in his own day, was to disarm all the most dreaded and fatal diseases of half their malignity and terror, and ultimately to prepare mankind for measurable exemption from disease and suffering.

In all these labors of love, the noble band of friends who gathered around him, converts to his doctrines, whom he had electrified with the holy fire of his genius, were greatly useful in carrying forward the provings of drugs upon the healthy. The names of Bœnninghausen, Stapf, Noack, Trinks, Hartmann, Rückert, Hering, Kurtz, Haynel, Roth, Schroen, Attomyr, Müller, Mayerhofer, Griesselich, Gross, and many others, will ever be remembered with honor and gratitude; while their provings stand as monuments of their perseverance, and furnish models which have not, as yet, been surpassed in excellence, and peradventure never will be.

In 1801, Hahnemann published a work on the efficacy of small doses of medicine, and of Belladonna in particular. The minute dose of the truly homœopathic drug is a necessary corollary from the fact that like cures like, and that the sick organism has its susceptibilities greatly exalted toward all agencies and instrumentalities possessing the attribute of similarity to the morbific cause. The question of the dose can never be settled by dogmatism so long as a multitude of causes are operating in human bodies to render some more and others less susceptible to drug action. Those causes and their resultant differences, call them constitutional, idiosyncratic, or by whatever other name you please, must remain, as long as man remains either a transient or permanent *nidus* for *miasmata* of a personal or of a more general origin. We can never too much admire the acuteness of genius which led Hahnemann thus early,

and, as it were, at the very initiatory period of his greatest of all medical discoveries, to apprehend the corollary of the smallest doses being able to cure diseases.

In 1805, he published an essay on a new system of meidcine, based upon pure experience; and, about the same time, another and very learned disquisition upon the utter, palpable, fundamental, and radical insufficiency of all precedent systems. These two last named publications were entirely unanswerable, and were mighty helps in preparing the European mind for the reception of a system which now begun to show that it was destined to revolutionize the world of medicine, and ultimately to become universal.

This same year, 1805, was signalized as an era in Hahnemann's life, by the publication at Leipzic of his "*Fragmenta de Viribus Medicamentorum Positivis, sive in sano corpore humano observatis.*" This may be called the first work really pertaining to a new and truly rational materia medica which the world had then been permitted to see. It was a most worthy commencement of a labor which, however much derided then by interested bigots, charlatans, and knaves, now stands a monument worthy of the admiration of the scientific world.

In 1810, Hahnemann gave to the world his New Organon of the Healing Art, the very grammar of rational medicine,—a gospel which the sophistry and the malice of all the opposers of homœopathy have never been able to invalidate, a foundation of which not even one stone can be loosened.

The great work—the immortal conception of a gigantic mind —was now to be ushered in for the benefit of earth's millions in all future ages. I allude, of course, to the *Materia Medica Pura* of Hahnemann, in six volumes, the publication of which was commenced in 1811, and completed in 1820. Incomplete in its first issue, of course,—for the provings (*probata*) which were to complement its deficiencies were still being carried on by Hahnemann and his friends and co-workers, both in the profes-

sion and among the laity, — yet, even in its incomplete condition, it evinced a skill and order of arrangement which filled and satisfied the demands of science, as they were urged in favor of the new *methodus medendi.*

The Vienna provers executed some really able scientific work in the way of provings of new drugs and re-provings of old ones. Some of them were truly exhaustive, and will stand as models for all future time. They will ever be regarded as monuments of the skill, the perseverance, and earnestness of those true and self-devoted men. Their labors were recorded in Stapf's *Archiv,* from 1822 to 1840, or even later. A proving of Thuja, made by the Vienna physicians, was a truly Herculean work, which developed powers and capabilities in that drug of which the heart of man could never before have conceived. All honor to those glorious creators of medical knowledge the elements of which had lain hidden from the foundation of the world!

In 1830, Dr. Wesselhoeft practised *in modo Hahnemanni,* among the Moravian brethren in Pennsylvania, and was instrumental in instituting a homœopathic association which bore the title of "The Northampton Homœopathic Society." Up to that time, and to about 1836 or 1838, there were no books of note on the science of homœopathy in the English language, and the students of the system were obliged to go to the German for what they wished to learn of its value and uses; and, as to most Americans that language was unfamiliar, the study was truly "a pursuit of knowledge under difficulties." Some few mastered the German sufficiently to enable them to consult the *Materia Medica Pura* in that language, while others used what could be found on the subject in the French language; many more had not been able to make progress in "the new Gospel of Healing," until the Organon and Jahr's Manual were published in English, which was done about this period.

This is the proper place to mention the work of Dr. Hering

on Serpent Poisons, which was published in 1834, entitled, "*Wirkungen des Schlangengiftes*," a work which embraces an amount of information on a most interesting subject for which the profession will be ever thankful. His proving of Lachesis has furnished the profession with one of the most potent remedies we possess; and the frequent use of this article for more than thirty years past has fully confirmed in my mind the fact, that that proving was an exhaustive and most reliable one. It has often been found adapted to symptoms and groups for which, without it, I could have found no reliable remedy. Great honor is certainly due to Dr. Hering for his many and valuable contributions to the Materia Medica of our school.

On May 27th, 1835, at a meeting of homœopathic physicians at Allentown, Pa., it was resolved to have a hospital and school of homœopathy. In pursuance of that resolution, "The National Academy of Homœopathy" was chartered by the Legislature of Pennsylvania, February 25, 1836, and Dr. Constantine Hering, a pioneer of homœopathy in America, — having arrived in this country, at Philadelphia, about the year 1833, — was elected its first President.

The fruits of this enterprise were soon seen; for in 1836, was issued from the Academy press in Allentown the first American edition of the Organon in English, from the British translation of the fourth German, with improvements from the fifth German edition. In the same year, 1836, was also published, "G. H. G. Jahr's Manual of Homœopathic Medicine; translated from the German, with improvements and additions, by C. Hering, M.D., in two volumes: Allentown, Pa., at the Academical Book Store, 1836."

The nearly simultaneous appearance of these two most indispensable works in the English tongue was a perfect Godsend to such American physicians as were unable to read them in German, and gave an impetus to the study, adoption, and practice of homœopathy, which could not be resisted. The old,

proud, haughty, dominant school of medicine was surprised. Many physicians soon adopted "the new medicine," whilst many more wearied themselves and all their friends in fruitless endeavors to overthrow it by arguments, or by endeavors to hoodwink and deceive their fellow-citizens by stupendous mendacity. Those efforts to disparage the new science met with signal failure. The new system grew and spread and strengthened itself by patient, honorable development, going on from year to year, increasing in the popular favor, until it has become a power in the world. All honor to the noble spirit which animated the Academic corporation at Allentown, and gave to Americans the much-needed facilities for the acquisition of the knowledge of a rational system of medicine!

Soon, in 1838, followed a "Repertorium," of "G. H. G. Jahr's Manual of Homœopathic Medicine; translated from the German, by authority of the North American Academy of the Homœopathic Healing Art: with an Introduction and some additions, by C. Hering, M.D., Allentown, at the Academical Book Store, 1838." This was a noble offering in aid of the American practitioner,— such an aid indeed as those can never sufficiently appreciate who enter the ranks of homœopathy at any period since the issue of that work. The physicians of those days supposed they had reached the *ne plus ultra* in the way of a guide, and scarcely permitted themselves to wish or to hope for any greater. By its help, it was now quite feasible for the earnest student to select remedies by the strict rules of art for the majority of his cases.

But the American mind, ever more active, persevering, and inventive than that of other countries, rested not until Jahr's Manual, under the editorial hand of the late much-lamented Hull, was issued from the New York press in two volumes, 8vo, in 1841 and 1842. This was the crowning glory of the literature of homœopathic medicine in America. Although it is not without imperfections, it will hardly be denied that the aspira-

tions of eager learners scarcely dared to desire or to conceive of anything superior to those magical volumes.

Since that period, however, the literature of homœopathy has increased with such a flood-like rapidity, that the most studious among us have hardly been able to keep pace in their reading with the issues from the press. Although this literature embraces works in all the departments of homœopathy, yet that of materia medica can fairly boast of its full share. Since 1842, Hull's Jahr's Manual has passed through many editions, with notes, emendations, improvements, additions, corrections, etc., by a considerable number of editors; and, notwithstanding the frequent issue of elaborate and costly works on the materia medica, all of which have much and peculiar merit, this cannot fail to be and remain one of the most cherished of the standard works of reference to the homœopathic practitioner, perhaps for decades or centuries to come.

The Materia Medica of Teste, though never completed, has points of excellence which were not found in such as preceded it; and if some able hand shall ever perform the pious duty of supplementing and completing the work of Teste, his labors will be blessed to the latest generations.

The *Symptomen Codex* of Jahr is an immense storehouse of symptomatology, with not an inconsiderable amount of physiological and pathological information which will forever endear it to the student and the practitioner.

I should do injustice were I to omit the most honorable mention of Hempel's Lectures on the Materia Medica,—a work conceived in a truly scientific spirit, and carried out with an ability which does its truly devoted author immense credit as a cultivator of a scientific field which is too apt to be found sterile and uninteresting. He has the rare merit of having treated the study of materia medica in such a manner as will ever render his book one of the most truly welcome works on this science, which has as yet appeared in this or any other land.

In 1846, a little band of workers, under the guidance of the late Benjamin F. Joslin, M.D., of New York, made a proving of Rhus radicans, which was so far complete as to enable the profession to avail themselves of its useful properties in a multitude of cases. The scientific arrangement of the material thus obtained was performed by Dr. Joslin in that careful and precise manner which was characteristic of him. His mind was of that accurate, methodical, and mathematical order which would insure the greatest completeness and usefulness in the work. He was trained and schooled in studies calculated to insure the most critical accuracy in whatever scientific labors he might be called to perform.

A large number of provings of various extent and merit, from those of a slight and imperfect character up to such as are complete and exhaustive, are to be found in the various reviews, journals, and other periodical publications devoted to the interests of our schools. In many instances, even short and fragmentary provings have given valuable hints and aids in the treatment of a wide range of morbid affections. A case in point occurs at this moment to my mind; viz., the proving of Cactus grandiflorus, by Dr. Rubini, of Italy. Many similar cases have been scattered through the journals for many years.

For two decades of years past, the physicians of America have contributed their full share to the improvement of our materia medica. This fact is worthy of honorable mention, at least, when it is considered that ours is a new country, and that but little more than one-third of a century has elapsed since the introduction of homœopathy in America.

The New Provings of Prof. Hale possess many points of merit and seem destined to become a favorite with the profession; yet I have found it not a light task to teach the student and young practitioner how to use in a truly homœopathic mode the facts and information with which the work is crowded. Doubtless its industrious and ingenious compiler will so im-

prove its future editions, which are certain to be demanded, as to render it a work absolutely necessary to the physician, and the ground of a fame sufficient to satisfy the desires of the most ardent ambition. Since the above was written, a second edition has been published, much enlarged in matter and not less improved in manner.

The very elaborate, accurate, and costly works of Professors Lippe and Gross, both of which are designed to facilitate the acquisition of a truly accurate diagnostic of the materia medica, though well conceived, are yet, in some material respects, imperfect. They fall much short of that degree of usefulness which their authors intended them to reach: still they do unspeakable honor to their authors, and will soon be found indispensable helps to the student, even if he has possessed himself of most of what has worthily preceded them. Both these works may reasonably lay claim to the honor of being the most truly philosophical treatises which have, as yet, ever issued from the press, in any age or any country, upon a subject so difficult, intricate, critical, and abstruse as the attempt to simplify and systematize the wayward, multitudinous symptomatology of our materia medica.

In 1849, there was published in French, a 12mo volume of 150 pages or more of provings by members of our School in Brazil. In 1854, it was published in Spanish. The same work was again published in an English dress in New York, in 1859. It is every way a creditable production, both in its scientific contents and in its manner of handling or arrangement. Many of the articles of which the pathogenesis is there given are really of great power and value. So the work forms a valuable contribution to our store of knowledge.

In 1853, the American Institute of Homœopathy published, at Philadelphia, a volume of 300 pages, 12mo, of American provings of a reliable character. It is well arranged, is a val-

uable contribution to the literature of our materia medica, and has been of great use to the profession.

Richard Hughes, M.D., has written a work on the Materia Medica, in two volumes, the first of which was published in London, by Turner & Co., during 1867. It gives promise of rare usefulness to the student and young practitioner. It is written in a style so simple and pleasing that it must inevitably become a favorite with all classes of the fraternity of homœopathists. I know no work in our homœopathic literature so calculated to obtain a universal popularity as this. Students will read it with such a zest as is manifested by the young, in reading Robinson Crusoe, or Gulliver's Travels. *

The great and pressing want with us now is some new and improved mode, better than any hitherto made known to us for studying the materia medica,—a method which shall render the acquisition of a competent knowledge of it, for practical purposes, more facile and less laborious and irksome than any hitherto practised. Very many plans and methods have been from time to time devised and promulgated, some of which were really ingenious and useful; still, a better plan is yet a desideratum. Knowing well the character of the American mind, I deem it not too much to hope that some ingenious and fortunate individual will yet strike out some complete and effective method which shall confer immortality upon his name, and procure for him the benedictions of all homœopathists. We may possibly see this before many years. We cannot know who the fortunate discoverer is to be, but the prize thus to be won ought to stimulate the inventive genius of every true lover of the science, until the result is reached.

In the bright future, when years and centuries and ages shall

* The work of Dr. Hughes (1st vol.) has been reprinted by Mr. Radde, of New York, with the addition of a full and complete index, which was a desideratum not found in the English edition.

have lapsed; when better governments and better laws shall have succeeded to those under which we now too often suffer; when the laws of health shall have become perfectly understood, and their adoption and observance shall have become the rule, as now they are the exception; when all the cognate branches of the science of medicine shall have been improved to their acme of possible perfection; when, as a consequence of the better condition of the physical man, his mental and moral status shall have evinced an approximation toward the angelic state, — what may we not expect from our ever-growing, ever-perfecting materia medica? What, but the rescuing of the race of man from most of the moral and physical evils which now seem his inheritance, and which now beset him with such demoniac malignity? What, but the reproduction of the Golden Age, when the lives of men shall be measured by centuries, as now by decades and lustrals; when sages and seers and poets and prophets shall sing the happiness of the race in Arcadian vales; and man, regenerated and rejuvenated, once more enjoy the felicities and glories of the primeval age!

POSTSCRIPT.

I have not the vanity to think for a moment that the estimate I have made in the preceding essay of the value of the labors of the several persons of whom I have there spoken will be universally, even if generally, approved. I am too painfully aware that there are some who are disposed to depreciate the labors of all our writers; to belittle the efforts and productions of such men as Hering, Hull, Lippe, Gross, Hempel, Hale, and many others in our own country, to say nothing of European authors. But believing, as I do, that all the writers named, and many others, had no other wish than to promote the sacred cause of homœopathy by their labors, I am bound to accept the

results for what they were intended, however short they may have fallen of the mark; and, although much of what we have from our best writers is necessarily imperfect, yet it is all worthy of honorable mention.

As it is not in my nature to "damn with faint praise," all I can say is that the estimate I have given of the men spoken of and of their labor is my own,—given to please no one but myself. Neither do I desire to displease any one. The value I have expressed as attaching to the work of any and all men is such as I believe will be found ultimately to be sanctioned by time and experience which are ever "the great touchstone" of truth, when applied to the labors of mortals. S. B. B.

55 East Twenty-first Street,
New York, June 1, 1868.

IX.

MATERIA MEDICA, THERAPEUTICS, AND PHARMACY.

BY WALTER WILLIAMSON, M.D., PHILADELPHIA.

Materia Medica.

As a member of the "Bureau of Materia Medica, Pharmacy, and Provings," I beg leave to call the attention of the American Institute of Homœopathy to the present unsatisfactory nomenclature applied to homœopathic medicines, and the necessity of a settled and uniform system for the various pharmaceutic preparations of our school.

The system, or rather the want of system, of the nomenclature at present in use is obviously defective, and needs revision. In the early history of our materia medica, substances were added to the list of medicines under names by which they were familiarly known in certain localities, — names unknown in other parts of the world, and not recognized by the language of science anywhere. When our remedies were few, and the practice of homœopathy was confined to narrow limits, it made but little difference by what names our medicines were called. But now the number of our remedies has very much increased, and new ones are being added every year. Our system has extended to almost every land within the bounds of civilization, and our books are written in or translated into a great many languages. Therefore it is important to adopt the best names for our remedial agents. These names should be convenient for use, generally known, and, as far as possible, conformed to the present state of science. There should be no possibility of a

mistake in the name of a remedy. The names of those at present in use should be retained as far as practicable, but objectionable ones should be changed; and for new ones none should be adopted but such as would enable a man of intelligence and moderate scientific attainments to recognize the substance meant. As the names now stand in the materia medica, those of Apis, Lachesis, Chenopodium, and many other examples, are a reproach to our school. It would be difficult to properly amend the nomenclature of our existing materia medica, and remove all its defects; but in the future, by vigilance and attention to proper authorities, similar inaccuracies may be avoided.

Intimately connected with the subject of nomenclature, stands a correct accentuation of the names of our medicines. By proper attention being paid to this subject, much that is reprehensible in pronunciation would be avoided, and a more intelligible use of technical terms secured. Let us have, therefore, an accentuated list of them published.

And, still further, there should be also published a list of authorized abbreviations, for the purpose of securing greater uniformity and perspicuity in certain portions of our literature.

As to arrangement of material; a work on materia medica, designed for study and reference, rather than for continuous perusal, should consist of independent parts, arranged alphabetically, under an approved system of nomenclature. This would probably be more convenient for use than any other plan at present known to us. In this way each article could be found without the trouble of consulting the index.

THERAPEUTICS.

In a work on this subject, the *symptoms* of the various drugs included in the materia medica, should be so arranged as to bring into easy notice every one, both singly and in groups in the order of their appearance in the original provings. This

would enable the practitioner to make an accurate and satisfactory comparison between the symptoms of the drug and the symptoms of the patient, both as to individual symptoms and the development of groups. The efficiency of the remedy prescribed will be proportioned to the similarity between the proved symptoms of the selected medicine and the idiopathic symptoms of the case, in all their relations, as to quality, locality (special reference being made to the tissue affected), order of succession in occurrence, and combinations.

A treatise on materia medica includes the subject of pharmacodynamics, or drug-forces. A treatise on pathology includes the subject of symptomatology, or morbid forces of the system; and a work on therapeutics treats of the application of medicines to the cure of the sick. A knowledge of these kindred branches is absolutely necessary, to enable the practitioner to discharge the high and responsible duties of a physician.

It appears to me that a more thorough and accurate knowledge of these essentially practical branches can be obtained by studying them separately, as we do other elementary branches of medicine, than is gained by studying them in a commingled state, the course commonly pursued at present.

Let our books on materia medica hereafter be made up, so far as they can be, of pharmacodynamics, or drugs-symptoms, as they are brought out and recorded in the original provings, and not hashed into separate regional divisions before the profession gets to see them. Let us follow and improve on the excellent example set us by Prof. Raue in his work on special pathology and diagnostics, until we obtain a standard work, which shall properly set forth the symptomatology, morbid forces, and natural history of diseases, as far as can be, without the interruptions of treatment or the blending of drug-symptoms. And finally, let us have a work on therapeutics in the shape of a repertory, in which the symptoms of medicines shall be so arranged as to admit of easy comparison with the symptoms of

the sick. The order should perhaps be something like the following: —

1. As to history; development, accompanying sensations, and results.

2. As to quality; noting the different tissues affected, as far as can be ascertained.

3. As to locality; designating the organs, or other parts affected, when possible.

4. The causes of aggravations and ameliorations, with the attending circumstances.

Pharmacy.

A Homœopathic Pharmacopœia, of American origin, — a work on pharmacy, which shall authoritatively teach the art of judging of the quality of drugs; when, how, and from whence to collect those derived from the vegetable and animal kingdoms; a full knowledge of the mineral substances used in medicine; and how properly to preserve and prepare all medicines, — is very much needed by the homœopathic school in this country.

It is very desirable to plainly designate the particular portion or product of the medicinal substance intended to be used, and that a formula for making each of our various preparations of crude drugs should be adopted by the profession.

As the indications for the use of our remedial agents in the treatment of the sick are founded on the similarity between the symptoms obtained from the provings of drugs on the healthy, and of those in disease, it is of the highest importance to the success of treatment that the preparations of medicines given to patients should be similar to those used in the provings. At present we have no recognized standard by which to regulate the various preparations of our medicines. In making tinctures, sometimes the expressed juice of the leaves of a plant, mixed with an equal quantity of alcohol, is used; sometimes a tincture of the root, and at other times of the whole plant, is made by

maceration; in some instances the fresh plant is used, and in others the dried; and all of these variously made preparations are called by the same name, and used as if they were identical. This objectionable variation, in preparations that should be alike, applies also to those of vegetable origin, made by trituration. Nor is it confined to articles derived from the vegetable kingdom: it extends to certain animal substances; and in some instances crude minerals and metals are prepared indiscriminately by trituration, or maceration in alcohol, and prescribed for the same symptoms.

It is also important that some general scale for the preparation of the attenuations and higher potencies of our medicines should be recognized by the profession, and all deviations from it should be marked by a suitable system of notation.

Proper attention to everything connected with pharmacy would no doubt increase the success of homœopathic practice, and remove an occasional cause of failure in some of our best-directed efforts to cure the sick.

Without wishing to interfere in the least degree with the labors of the Bureau of Materia Medica, I would suggest that a special committee of five be appointed by the Institute, on the subjects of nomenclature, accentuation, and abbreviations; to report to the next annual meeting. If the committee be composed of men located near each other, they can meet for consultation without inconvenience.

The above is respectfully submitted, and the subject commended to the attention of the Institute for such action as its importance demands.

SECTION III.

REPORT OF THE BUREAU

OF

CLINICAL MEDICINE AND ZYMOSES:

HENRY D. PAINE, M.D. - - - - - - - - - - - - New York.
P. P. WELLS, M.D. - - - - - - - - - - - - Brooklyn, N.Y.
S. M. CATE, M.D. - - - - - - - - - - - - - Salem, Mass.
D. H. BECKWITH, M.D. - - - - - - - - - - - Cleveland, Ohio.
J. C. BURGHER, M.D. - - - - - - - - - - - - Pittsburg, Pa.

TO THE

TWENTY-FIRST SESSION

OF THE

American Institute of Homœopathy.

VOLUME I. NUMBER 2.

CONTENTS.

VI.	Therapeutics as related to Pathological Anatomy	P. P. WELLS, M.D.
VII.	Suggestions upon Hydrothorax . . - -	S. M. CATE, M.D.
VIII.	The Yellow Fever at New Orleans in 1867 -	WILLIAM H. HOLCOMBE, M.D.
IX.	Case of Obstruction of the Bowels - - -	GEORGE E. BELCHER, M.D.
X.	Tuberculosis with Sound Lungs - - - -	DAVID COWLEY, M.D.
XI.	Thermometrical Phenomena in Disease - -	JOHN J. MITCHELL, M.D.

VI.

THERAPEUTICS AS RELATED TO PATHOLOGICAL ANATOMY.

BY P. P. WELLS, M.D., BROOKLYN, N.Y.

EARLY in the controversy which arose on the announcement of the homœopathic doctrines, it was objected to them by their opponents, that both they and their author ignored the whole science of pathology, as then taught in the schools. This was cast at him as a reproach, and cited as evidence of his ignorance. It was held as proof that the doctrines he taught were inadequate to guide the practitioner in his endeavors to apply science to the art of healing. It was thought to be conclusive as against homœopathy that it excluded so large a part of the science of the schools. In reply it was shown that much of what then constituted the received science of pathology was no better than sheer hypothesis which had but recently taken the place of other equally baseless hypotheses, and that none of these had ever been given to the profession as proved facts; that their only existence, indeed, was in the imaginations of ingenious men. In the place of these hypotheses, Hahnemann demanded a pathology based on facts. He would admit nothing till proved true, and he abstained from inculcating principles till he regarded them as abundantly established by careful and adequate observation. To replace these hypothetical doctrines he gave to the profession a philosophy of disease which he claimed to have verified by the slow and sure process of induction; so that the reproach that he ignored the science of

pathology was met by presenting to the world a better system, a true philosophy, which, being founded wholly on observed facts, he claimed should take the place of the old which was based so largely on mere imagination.

Here the two schools stood, each claiming exclusive authority for its teachings, when a new thought struck the leaders of the old. It was to study the results of disease, as these might be visible in the changes wrought by them in the material tissues of the organism. From this has resulted the modern science of Pathological Anatomy. So the new thought has not been without its fruits. Such as these are, they are of recent growth. In the beginning of the controversy they were the property of neither school, for they had no existence. Now, when it is alleged by the old school against the new that the latter practically rejects the science of pathology, it is to this new element of that science that reference is chiefly made. It is claimed — and not without show of reason — that this is the child of the old school; that by it this has been begotten, and has reached its present age and proportions by its own almost unaided efforts. And now, while it cherishes with peculiar love this its youngest darling, the sole offspring of its ripest age, and the only one which has been born of observed fact, it fails not to throw all its bitterness into the complaint that this is not received by the new school with equal tenderness, and that homœopaths do not share with the authors of this science all their fond expectations of its practical benefits.

It is forgotten apparently by the complainants that, while their care has been concentrated on this object of their love and pride, those whom they thus accuse of want of co-operation in their labors, and of appreciation of the results, have been quite as actively, and more exclusively employed in developing and perfecting another member of the family of sciences, — one of far greater importance to the art of healing than is this science of the results of diseases. They coolly ignore the sublime

labors which have given birth to a new Materia Medica, and presented it in its present proportions to the world. They know nothing and care nothing for the pains and toils, the watchings and wastings, from which this has grown. Nor are they more mindful of the fact that, while they of the old school have been thus busy in studying the results of disease, the new has brought into life the pre-ordained law of healing, founded in the nature of men and things by the Power which created both. Though it had been permitted by that Power that, through and by the remissness of the medical profession, it should slumber for ages with the unknown, now, just at this period of the history of science, when it began to demand demonstrated facts as its only foundation, this law was brought to light. It now lives, a power for good in the earth, solely as the fruit of the labors of the founder of the new school. Thus it will be seen that each of the schools has had its specialties of labor and its fruit: that the old do not appreciate and accept those of the new is a loss to themselves. We do not return the reproach they cast on us, though we might with greater force; for that which they reject is more important to practical success in healing than the science which they accuse us of disregarding. It is not to be forgotten that rejecting a truth does it no harm, though many seem to think it is thereby annihilated. The sceptic is the sufferer.

When it is alleged that homœopathy disregards the teachings of pathology, the allegation now no longer refers to that general science of disease, as at the first, but to this new creation, — Pathological Anatomy. To this charge we are no more called to answer than members of the other school should be to that of neglecting our Materia Medica, or our dynamic philosophy of disease. But still we propose to reply, not for their sakes who make the charge, nor for our own, who well know how utterly baseless it is, but for the sake of some few in our

own school who may be led, by the iteration of the accusation, to suppose it more plausible than it really is.

The charge is that the homœopathic school neglects and discards the teachings of pathological anatomy in their practical dealings with the sick. We begin by peremptorily denying the truth of this charge, for it is neither through a neglect, nor by a disregard of the teachings of this science, that it is not allowed a place in the list of those elements of knowledge which control some of our practical duties. And it evinces nothing less than sheer ignorance of the proper nature and place of these teachings, as well as of the true nature of disease and its cure, to claim for them a place where, from the very nature of the case, they can never be helps, but only hindrances.

Further, to make pathology a dominant power in the selection of the curative agency, as the old school affect to do, is to entirely mistake its nature and importance, and to ascribe to it a function wholly foreign to its true relation to the practice of medicine. It is just this refusal to thus misapply the teachings of this science that constitutes the sole ground of the charge against us, which is falsely made, and which is no less than one of criminal ignorance. But it is, on the contrary, just because we are *not* ignorant, but see very clearly the true nature and relations of these teachings, that we deny them a place with those elements of knowledge which control our selection of curatives. It is a clear insight into this nature, and these relations, which manifests in the clearest possible manner that they can, from their very nature, have no place here. It does not follow from this that these teachings are without value in our estimation, or that they have no place in medical science. The exclusion of them from our process of prescription, — this is the offence. Let us see how grave it is, or even if it be an offence at all against true science.

In examining this question, the first fact which arrests our attention is, that, in the act of prescribing, the two schools are

not on the same ground. The old stands wholly on hypothesis, or on this as modified by a partially enlightened empiricism; while the new stands upon a no less sure foundation than an established law of nature. This difference is so great that whatever censures the old school, from its standpoint, may cast upon the new, are, of course, of little moment. And with these censures, therefore, we have now nothing to do. We take only the one charge of excluding the science of pathological anatomy from our art of prescribing. In the outset we admit its truth, and we proceed to examine it from our own standpoint of law, that we may learn whether, in the light of this law, it is a fault or a merit.

In our office of prescribers, we are at all times bound by our allegiance to a law which we had no part in enacting, and which we cannot repeal, and dare not neglect. What it requires of us, that we must do; and experience has abundantly taught us that in doing this with the utmost exactness is our greatest practical success. Being now upon our own ground, it is not necessary to stop to prove the reality of the law; for this we assume, as also that the only known law of cure is that of similars. The question, then, before us is simply, What does this law require of us when we attempt a cure under its guidance? Whatever this may be, when we have rendered obedience to it, we stand sinless before the world with all the bitterness and pride of its schools.

We have said the law of cure is that of *similars*. The idea of similarity involves that of comparison of two or more objects, of which we can have a clear perception. The comparison which the law of cure requires is that of the elements of morbid action on the one side, with those of the action of the curative agent on the other. On both sides, the elements to be compared must be of a character to admit of our positive knowledge of their true characteristics. Certainty in our prescriptions depends on this certainty of our knowledge: and of this certainty we are to

be assured to the greatest possible degree; we must be satisfied with nothing less.

If the law expressed by the formula, "Like cures like," requires a comparison of the elements of the pathological anatomy of our case with similar elements (viz., the ascertained results of the action of curative agents), we are, no doubt, to yield obedience to the demand. If not, then only to the law are we responsible, and not at all to the cavils or complaints of those who reject the law. But the law does not require this comparison. This is evident from several considerations. The first is, that there is, in most cases of acute disease, an initiatory stage, in which they are curable to a far greater extent, and with greater certainty and ease, than when they have passed beyond it. It is in this stage that there is the greatest amenability to curative agencies. There is, as yet, no change wrought in the material tissues of the organs; and consequently there is no pathological anatomy, and none of its elements can therefore be obtained for the comparison required by the law. If these elements are necessary to a sure and successful prescription, then here, in this point in the history of cases, where they are most curable, they should be found in the greatest numbers. And yet it is just here that they are not found at all. This is perfectly conclusive as to any necessity there may be for the consideration of the facts of pathological anatomy in determining the choice of the curative agent. We may go farther, and declare plainly that the law of cure never demands any comparison in which these facts are of necessity to be embraced. If it were otherwise, then the law would require that this large class of curable cases (the more curable, the nearer the prescription approximates to the initiation of the attack) be allowed to pass on without prescription, till diseased action has developed the required pathological changes in the tissues of the organs, before presuming to attempt a choice of a remedy for the case. There can be no greater absurdity than to suppose this to be one of the conditions

of a divinely appointed law, the object of which is to secure certainty and success in the cure of the sick.

There is another objection to our acceptance of the elements of this science into the group of facts, which are the proper objects of comparison, when prescribing according to the law of cure. We have seen that *certain* knowledge, as to the true nature of the facts to be compared, is indispensable to their being admitted to our consideration in the discharge of this duty. The fact that *certainty* as to the pathological conditions is only attained by inspection after death and dissection, is fatal to their claim to be received into the company of those other elements of the case, which may be fully examined and understood during life, and which alone must determine the choice of the curative remedy. It is not to be denied that the pathological anatomy of any case, even after it has so far advanced as to develop changes in the material tissues of organs, is, during life, to a considerable extent, a matter of conjecture. The best that can be said of it is, that the conjecture is probable. This is to fall far short of that certainty which the law of cure demands. It is reasonable to insist that knowledge obtained only after death comes altogether too late to be of use in finding the cure for the living sick.

We have still another objection to the claim set up for this class of facts. It is this. The relation which the divinely appointed law has established between the diseased condition and that external agent which by the law is its natural cure does not exist, in any degree, on the part of the disease, in those elements of its condition which constitute its pathological anatomy, but altogether in other elements of the case, easy of recognition, and admitting of certainty of knowledge of their true character, so far as this relationship of law is concerned. The truth of this assertion is abundantly sustained by the practical successes of those who have made this last class of facts the basis of their decisions in prescribing for the sick, to the exclusion of

the other class urged upon them by those only who were ignorant of the spirit of the law which has ever proved itself a safe and sufficient guide. The successes of Hahnemann, Gross, Stapf, and Bönninghausen, and of others like them in Europe, and of Hering, Haynel, and Dunham, with many others in our own country, have been so obtained. Not that these masters were ignorant of the science they have been accused of neglecting; but they saw clearly its uses, and restricted themselves to these, instead of attempting to derive from it information which it never did and never can impart.

On the other hand, the truth of this assertion is equally sustained by the failure which has attended the endeavors of those who have sought to incorporate the facts of this science into a practice otherwise founded, in part at least, on the homœopathic law. Only disappointment has followed this course, as, from the nature of the case, it only could. The more and the more frequently they were unsuccessful, the harder have they striven to make a more exact application of what they regarded as the science, *par excellence*, of their calling — viz., that of pathological anatomy — to the demands of their cases, till disappointment, often repeated, has begotten scepticism, and scepticism has ended in apostasy, and apostasy in disgrace.

It was, however, due only to the incompetency of the individuals who were thus trying to improve the law of nature by adding to it that of which it had no need, and of which it would not accept. The practitioners who have relied upon this science in their prescriptions have not been the successful men of our school.

There is another objection to the use of the teachings of this science as urged upon us by our opponents. It is this: the only knowledge we can have of these facts, during the life of the patient, is derived from the *symptoms* of the case. These are just as available to the prescriber without attempts to refer refer them to *supposed* changes in the tissues of internal organs

as with. Indeed, they are much more so. Taken of themselves, they form a part of the living facts with which we have to do. But, taken as exponents of changes which may or may not have been wrought in the tissues by the morbid process with which we are dealing, they are always extremely uncertain, and not unfrequently wholly deceptive. It is well known, and post-mortem dissections have abundantly established the fact, that symptoms so similar as to admit of no distinction have been connected with pathological conditions which were even the exact opposites. This has been well shown by that eminent philosopher and physician, Abercrombie, in his treatise on diseases of the brain. The same has been observed by many others, who, like Abercrombie, have been rather puzzled than instructed by it. In such cases, as we *cannot* know to which of the opposite states we are to refer the symptoms, we have no resource but to guess. If the greatest possible certainty, and not conjecture, is to be sought and secured in our prescriptions, then this attempt to incorporate into the basis for them an element so largely made up of hypothesis must be abandoned. To this we may the more readily assent, as it has hitherto contributed nothing to practical success, and only needlessly and uselessly complicated the process by which alone it can be attained.

The above objections to this use of pathological anatomy are wholly from its failure truly to indicate the disease. It will be readily seen, from what has been said, that there must be a similar failure to indicate the drug. A prescription, according to the law of cure, is the finding of a drug which has the power to produce, and which has been known to have produced certain effects on the healthy organism, like to the phenomena of the disease to be treated. These are the phenomena by which the disease is related to the drug as its curative. If the facts of the science we are considering belong to that class, then we are to find, in the known effects of the drug, changes in the

material tissue of organs, the result of its action similar to those which are developed by the disease, the result, on the other hand, of the morbid action. In order to attain this knowledge of the changes which drugs can and will effect on the tissues of organs, it will be necessary to put the proving on the healthy to the extent of poisoning, and the poisoning to the extent of destructive changes in the organs of the body, and beyond this even, to the destruction of life, before the required knowledge can be obtained. For, as, on the side of the disease, the facts of this science have only been gathered by dissection, so, on that of the drug, if the law of cure requires similar facts, the result of drug-action, to be brought into comparison with those which dissection has disclosed as the result of the disease, can only be obtained by the same process. Every prover of the drug must be dissected, and each patient must share the same fate, before we can certainly know that the changes wrought by the two agencies are similar. And, as drugs do not affect all persons alike, the sacrifice of one prover for each drug, and one patient for each disease, would be wholly insufficient. This certainly presents the claim and the charge so often and so ostentatiously paraded by the old school in a sufficiently absurd light. And it is possible that the stolidity which has failed or refused to see the superiority of the results of a practice founded on law, over those of a practice founded on hypothesis, might see that prescriptions in such a case could be of no great value.

But the difficulty of introducing the facts of this science into the process of prescribing, under the guidance of the law of similars, is further increased by the fact that the changes of tissue which constitute them are from day to day themselves changing; so that the exact conditions of the pathological anatomy of a case, known yesterday, have ceased to be the exact conditions of the same case when we visit it to-day. And this is repeated from day to day as the case proceeds. This

would necessitate daily examinations, such as we have shown to be requisite in the first instance, as long as the duty of prescribing for the case should continue.

It may be objected to this view of the case, that it contemplates prescribing under the guidance of one law only, — that of similars. This objection can come only from the side of the old school. The scope of this paper attempts no reply to them. Its aim is to show the less instructed and younger members of our own school, the absurdity of the claim set up for this misuse of pathological anatomy. For their sake we reply; and we do so by asking the objector if by this he means to intimate that prescribing with the unlimited license of hypothesis is better than to do so under the guidance of law? If not, then, we would further ask if he knows of any other law than that of similars, available for the guidance of the prescriber? If so, then we ask, first, for the evidence of its existence even; and, secondly, for the evidence of its superiority to the law given us by Hahnemann, which we have proved and accepted. And we may here say that we can accept no other evidence of this superiority than well-attested clinical results superior to those which have followed practice based on the law of similars. To such evidence we are all most assuredly bound to yield, and to give to a law so attested the same hearty allegiance we render to that which we now know and trust. In the absence of all evidence that any such other law exists, and in view of the abounding evidence of the superior results of a practice founded on our law over that based on either hypothesis or empiricism, we claim to be fully justified in making this success a full answer to the claims of pathological anatomy as a guide in prescription. We appeal to this, the only known law of cure, and, in its light, show the utter absurdity of the claims. This is our defence against the charge of ignorance, because of our refusal to so admit them; and this is the defence of homœopathy when it is charged with inadequacy as a guiding law in the treatment of

the sick, because it excludes, not helps but hypotheses which are hindrances.

So far, we have argued this matter as related to our own school, and wholly in the defensive, as against those who have sought, by this absurd demand and charge, to discredit an entire school and practice. It would have been well, before they made this futile attempt to disparage, that they had been better acquainted with its principles. It is easy to believe that, if they had known more, they would have spoken less. We now leave the defensive as to this charge, and assert that the attempt to subject their presumptions to the control of the facts of this new science has been an utter failure on the part of the old school in their treatment of the sick without law. The supposed facts are as utterly useless in a practice which recognizes no law of cure, as in one guided by the law of similars; and, to sustain the truth of this, we appeal to the records of such practice, and particularly to those of the results of the treatment of that disease best studied in its pathological anatomy, Typhoid Fever. It may be unhesitatingly affirmed of this fever, and of its treatment without law, that it is no more successful to-day than it was when Louis made his first dissection in the series which settled the pathological anatomy of the disease. Louis himself never pretended that his discoveries had modified his own prescriptions. It is interesting to follow him in this series of laborious studies, and see how his prescriptions in succeeding cases are not in the least affected by the knowledge he had gained of the localization of the morbid process and the peculiar changes in the tissues invaded. They were the same in the last of the series as in the first. He never pretended it was otherwise. Nor did he pretend that they threw such light on the relationship of the fever to its curative agencies as should induce any other man to modify his prescriptions for typhoid fever. If the facts discovered by M. Louis have so modified the hypothetical or empirical treatment of this fever by any man as that he has thereby ob-

tained a better success than attended the practice of intelligent men before these discoveries, we have failed to learn the fact. The most that has been claimed for them, as modifiers of practice, is rather on the score of their having discarded remedies than of having suggested any; that by them physicians have been induced to give fewer and less irritating drugs than was the practice before, — in plain English, that they have been instructed to do less mischief than before, not to do more good. And is this all? And has the cry from those who have learned so little been so loud, and sometimes even so offensive, because others, who have needed no such restraints, have refused to encumber their better practice by an accessory which has brought to themselves no greater good?

We go one step farther: we assert that the claim that the facts of this science have beneficially modified the practice of hypothesis or empiricism in other diseases, to a greater extent than in this fever, is false. They have suggested no useful remedies to the old school itself; but it has been reproaching the new, because it refused to them authority to modify the practice founded on law. It is a sufficient reply to this impudent claim to be our teachers in this matter, as set up by these gentlemen, *first cast the beam out of thine own eye.* We say to the gentlemen of the old school, Show a better clinical record than your predecessors, and prove its superiority to be owing to the aids you have derived from pathological anatomy, before you attempt to discredit your compeers for rejecting it from theirs. Go farther, and show a better record, with this new aid, than the new school shows, having rejected it, and you have won the victory in the controversy. By any other course, you expose yourselves to the suspicion that you are already conscious of the weakness of the position you occupy, and of the charge you have brought. Show that you have fully and fairly admitted these facts to the control of your own prescriptions, and that the result is a greater success than attends our practice founded on law, and you will

merit respectful attention. Unless you do this, your present course suggests a resemblance to the policy of that animal who would have his neighbors mutilated to escape the singularity of his own misfortune. The suspicion will be that you have in your own practice found the resort a failure. With this hint we take leave of these complainants.

The laws of nature are the appointments of that Supreme Being who, in their ordination, comprehended all their relations and results from the beginning. In their enactment he could by no possibility make a mistake. One of these laws declares the curative relationship between diseases and certain drugs. Like all the rest, this law exists, not in the imagination or edict of any man or school, but in the very constitution of men and things, as ordered in the beginning by this Almighty Power. The intelligent world glories in the fact that all natural laws have been ordained in infinite benevolence, as well as in infinite wisdom and power. Is this natural law of curative relationship an exception, and the only one in all the domain of God's natural government? (Where is the evidence of the fact? and if so, why?) If this relationship at all embraces the facts of the science we have been discussing, and calls for a consideration of them in the curative prescription, then we submit that we have already sufficiently shown that this law is altogether a mistake. The benevolence so conspicuous in all the rest is wholly wanting in this, because its application is an impossibility. The law, in this case, is simply a trifling with human necessities. The Author of all good has never so mocked his dependent creatures. He has not included the facts of this new science in the elements of diseased and drug-action, in the similarity of which he has ordained the law of cure. A clear appreciation of these elements will be quite sufficient to show that the exclusion of these facts from the scope of the law is of divine appointment, and that we, of the new school, have only recognized this arrangement, and are in no way responsible for its existence.

It is certainly most clear that, if a God of infinite wisdom and benevolence had determined a law of cure for the relief of the suffering sick among mortals, and had really purposed that these should be healed by virtue of a compliance with its provisions, both these attributes of the Divine Being would have combined to establish the law in ascertainable relations between diseases and the agents ordained for their cure, such as should be most obvious to the senses, and most readily available for the purpose for which the law was ordained; and, more, that these relations would assuredly be such as could be known and understood, and by no means such as must of necessity be attended with more or less doubt and uncertainty during life, and, least of all, in any which must rest largely on conjecture. This is precisely the arrangement which has been made in the enactment of the law of cure by similars, in accordance with these Divine attributes. Its relationships are wholly in those elements of the two classes of objects of comparison, the easiest of perception and comprehension, so far as is necessary to a compliance with the demands of this law. This has been happily secured in the selection of the elements in which these relationships are fixed; for a selection of these there certainly is, and such a selection as would hardly have been made by any other than the Author of this law. At the first glance, it would seem to have been best to select those elements always present in any form of disease, and make these the basis of the comparison on the one side, and then there would be only the small difficulty of finding a single drug which in its action on the living organism presents similar elements; and the whole difficulty of prescribing for this disease, for all time and in all cases, would be at an end. This is precisely what the Founder of this law has not done. He has given to it a much broader scope, and by this has relieved it of an uncertainty which must otherwise have inhered in it forever. If the law had been fixed in these elements which characterize the class, then embarrassment would have arisen from the number

of agents capable of presenting, in their action, phenomena similar to this class, as present in the case to be treated; and the only resort would be to give them in succession, till we should hit upon the right one. This would cause great delay and danger. The Maker of the law did not so ordain.

As illustrative of this, suppose the case to be treated one of simple dysentery. It has frequent, small discharges from the rectum, of mucus or blood or both, accompanied with pain, tenesmus, and fever. This group of symptoms is present in all cases of the disease. On turning to the materia medica for a remedy, the prescriber is met by more than a score of drugs which have produced this group of symptoms on the healthy, living subject. What will he do? If he is a beginner, he will do as all of us have done, till we learned better,—give one of the number and, if it does not succeed, another, and so on. He will only be realizing the disappointments we have all encountered, till we found that the similarity which the law requires is not in these generic elements of either the disease or the drug.

But the chief difficulty, and that which made the selection of generic groups as the domain of the law impossible, is the fact that they do not constitute the whole case; and also, when they are found in any succeeding case, they are by no means a repetition of identities. Though there is a general resemblance or common features in this generic group, it is, in each case, surrounded by, and associated with, concomitants, which declare the specific nature of each case in this group as it occurs. By these the truth is made clear that the resemblance of the generic phenomena of cases is superficial and apparent only, and not real. These concomitants stand in each case as the exponents of its true character, and they alone declare what *kind* of case it is with which we have to do. The generic phenomena proclaim the family to which the case belongs; the concomitants of these, or the specific phenomena, the particular member of the family which we have just met.

It is the resemblance to the features of this particular member of the family, which the law has made it incumbent on us, in our office as prescribers, to find in the effects of some one curative agent on the living organism; because it is just in these specific features of disease that Infinite Wisdom and Benevolence has established the domain of the law of cure, so far as the disease itself is concerned.

On the side of the drug there was, of necessity, a similar relation of elements from the sum of the effects produced on the organism by particular drugs and for a similar reason. The generic, or those common to several drugs, were excluded; and those which belong to the particular drug, and characterize it, were selected. And these on the one side, and those which declare the specific character of the disease on the other, were the precise elements of the two objects of the comparison in which Almighty Power and Wisdom placed the law of cure. Resemblance of these is the *like* which cures. The law of similars requires and accepts no other similarity. Hence the facts of the science of pathological anatomy have been excluded from the requirements of the law by its Great Author in its original constitution; and he who attempts to thrust them in, where they have been thus excluded, is likely to have no great success. It follows, also, that their rejection from the prescriptions of our school, so far from being any sin against science, is only in compliance with the reqirements of the great controlling natural law.

But it is often and plausibly asserted that it is certainly our duty to study the nature of disease as disclosed by its results, meaning by this the facts of pathological anatomy. To this there can be no objection, and we do not object when we assert that the light which these facts throw on the nature of disease does not reach at all to its curative relations, as we have shown, but is limited solely to that power to produce in the tissues the changes from which these facts have had their origin. The

nature of disease, thus far, is disclosed by these facts, and here the revelation stops. There is a seeming of scientific wisdom in the assertion of this duty, calculated to mislead the beginner as to the extent of the benefits to be derived from the investigation recommended. If, in its results, he expects, as many seem to have done, a disclosure of the whole nature of disease, he is only to be disappointed. He will simply learn that it is the nature of this or that disease to effect this or that change in the anatomical constitution of the tissues of certain of the organs of the body. Beyond this he can learn of its nature absolutely nothing at all. We have denied that we undervalue the knowledge which this science reveals. We add that it is no contradiction of this denial when we limit its application, as above set forth. We deny that the limitation is ours. It is in the nature of the facts of the science itself, and in that of the general nature of disease, and of the law by which God ordained it should be cured. We simply recognize the fact, and receive it as it has been given into our hands by the Power which has established this limitation, with the other facts of nature. If this Power has limited the proper application of the knowledge of this science to that part of our practical duties which deals with the diagnosis and prognosis of diseases, we have no power to change the arrangement, and we do not see how any benefit could be educed from it if we had. It having been so limited and connected, there can be no wisdom in endeavors to force on this branch of knowledge functions which can never belong to it, or in anticipating any light on other elements of the nature of disease which it can never shed. It is the part of true wisdom here, as in other departments of natural science, to discover the divinely appointed arrangement, to receive it, act upon it, and therewith to be content.

VII.

SUGGESTIONS UPON HYDROTHORAX.

BY S. M. CATE, M.D., SALEM, MASS.

THE aim of the present paper is to present some things connected with the accumulation of fluids in the cavities of the chest, rather than to give an exhaustive treatise on the subject.

If we are called to a patient with short, quick breathing, worse from motion, and which is increased by walking, or going up a hill or up stairs, and in some cases by lying down, we shall at once have our attention called to the organs of the chest. If the examination of the pulse and application of the ear to the chest shows the heart to be so near a normal state as not to cause the troubled breathing, we proceed to examine the lungs and the chest for the cause of the disturbance. In this way we soon find the nature of the changes in the chest. With pneumonia in the parts of the lungs that are inflamed, we find increased dullness on percussion, but usually also crepitation, mucous or bronchial râle, and other sounds preternaturally loud. Sometimes, indeed, the lung is inflamed and hepatized to such an extent that all respiratory sound is lost, and then the marks distinguishing between effusion and hepatization are more difficult to recognize. With effusion, the dullness is usually attended by a respiratory sound that is faint and feeble; or the respiratory murmur seems muffled, and farther away from the ear than in other corresponding healthy parts of the chest. Then, too, with effusion, the dullness usually commences at the lower part of the pleural cavity,

and, when the patient is in a sitting posture, extends up to a given line. If the position of the body be varied, this line will vary. Thus by lying down it is sometimes changed so much that some parts, before dull, become clear in sound, and other parts, before clear, are now dull. So also the faintness of the respiratory murmur is somewhat changed by the change in the posture, which alters the relative position of the fluids in the cavity of the chest.

If the fluid is confined to some part of the cavity of the chest by adhesions of the adjacent pleural surfaces, a change of posture does not change the sound. But in such cases the nature of the trouble is usually determined by the respiratory murmur, for, it is clear, and in a measure healthy, but fainter, behind the fluids; while in pneumonia and pleuro-pneumonia the respiratory murmur is increased in loudness, or supplanted by crepitation, mucous râle, bronchial rhonchi of various kinds, or else entirely lost as in complete hepatization. With effusion these sounds are, as a rule, decreased.

The most marked exception is in cases where the effusion occurs in a person who has disease of the lungs, such as emphysema, tuberculosis, or chronic bronchitis. In such cases the respiratory murmur is increased, and in some cases to such an extent that it is only partially muffled by the fluid pressing upon it. With such a combination of symptoms, the diagnosis is sometimes difficult. But, if all of the symptoms be taken together, we shall usually, after a careful examination of the chest, reach an intelligent opinion of the case.

In most cases of effusion into one cavity only of the chest, that side of the chest is made larger. Thus, in examining the chest of a person who manifests some of the symptoms of hydrothorax, if we pass the hands down the uncovered chest from the apex to the base, one hand on the back part and one on the front, taking first the right and then the left side, we shall easily discover if one side of the chest will outmeasure the other an inch or more

through the base. If we find a case of this kind, and on farther exploration find that the lower part of the enlarged side of the chest is dull on percussion, with the dullness extending up to a given line, and that through the dullness a faint respiratory murmur can be heard, we may feel pretty sure there is serum in the pleural cavity. In some cases the enlargement is so great that the intercostal muscles bulge out; and the affected side measures several inches more from the centre of the lower end of the sternum to the centre of the spine than the opposite.

Exceptions to this rule occur in cases where a previous pleurisy and effusion have bound down one lung, and after absorption of the fluid the chest is shrunk below its normal size, and hence the opposite side is relatively larger. A similar result is produced, but in a less marked degree, by tuberculosis of one lung, whereby it is impaired in its vitality, and atrophied: there is a loss of volume of the external chest corresponding to that of the lung In cases like these, the general symptoms, history, and lack of all evidence of effusion would easily point out the correct diagnosis.

We shall not always find all the signs of effusion in the chest when serum is abnormally present. In cases of general dropsy, and in cases of effusion that comes on slowly as a sequel to other diseased states, — such as tuberculosis, cancer of the stomach, degeneration and other disease of the liver, disease of the kidneys and other organs of the abdominal cavity, — the accumulation is usually slow, and often attended with a gradual waste of other parts, so that the liquid is better tolerated by the system, and produces less marked signs of its presence. But in these cases, also, when carefully examined, a correct estimate of their importance will be reached.

When we have detected an accumulation of fluids in the cavity of the chest, and determined the location and nature of it, we next inquire how it originated.

The membranes which form the outer covering of the lungs,

the inner lining of the cavity of the chest, the outer covering of the heart, and the inner surface of the pericardium, are of the description denominated serous. When these membranes are in a healthy condition, a given portion of the aqueous part of the blood is poured out to act as a lubricating material upon the costal and pulmonic surfaces of the pleuræ which move on each other when breathing, and upon the outer surface of the heart and the inner surface of the pericardium during the motions of the heart. When the circulation of the blood through the vessels of these membranes is natural, just enough serum is poured out upon the surfaces to answer the purposes of lubrication. When spent for this use it is absorbed by other vessels of the same surfaces; and, after entering the venous circulation or the lymphatics, the useless portion is carried from the system through the skin, kidneys, and other outlets of the body, while the rest is again mixed with the blood for further action in the system. But when, from any cause, the volume of the circulation is increased in any of these membranes, more fluid is secreted than absorbed, and it accumulates in these cavities.

The condition of the serous membranes which produces increased secretions may be caused, first, by an increased activity in the arterial circulation of the parts, such as is present in inflammation, attended with increased heat, swelling, and pain; and, second, by obstruction in the circulation in any considerable branch of the venous system — such as sometimes occurs to the vena portæ in some diseases of the liver — and a consequent damming-up of the blood, and an increased swelling of the parts in which such obstructed blood accumulates; the occlusion produces a similar result in phlebitis, especially when occurring in the femoral vein. When the cause is an obstruction in the venous circulation, the swelling commences by distention of the capillary veins instead of arteries as in the former case, and hence there is less heat and redness in congestion than attends inflammation.

Inflammation and congestion are the principal causes of the preternatural accumulation of fluids in the cavities of the chest.

It is probable that one of these processes is present when dropsy occurs from disease of the kidneys. In such cases, the accumulation of serum usually first occurs in the cellular tissue under the skin, afterwards in the abdominal cavity, and last in the chest. In cases of kidney dropsies, the urea and other effete matters left in the system sometimes act as irritants to various parts; when strongly determined to the serous membranes of the chest, they produce inflammation and effusion. The dropsy, commencing under the skin in the cellular tissue, sometimes extends to the abdominal cavity and afterwards to the chest. Dropsical states originating in disease of the kidneys do not usually first manifest themselves in the chest, but come into the chest from other parts. If dropsy first shows itself in the chest from kidney disease, it is usually by the establishment of the inflammatory process just mentioned.

The terminations of hydrothorax are: in absorption, usually followed by adhesion of the two opposing surfaces of the pleuræ; by pointing and opening through the external walls of the chest, resulting in partial or complete recovery; or by continuance and increase of the disease, with, first, a rapid accumulation, pressure upon vital parts, and death; or, second, a more slow accumulation and disorganization and destruction of the tissues, and thence death.

With these views of the pathology of the disease the treatment may be naturally arranged in two classes, as arising from inflammation or from congestion of some portion of the serous membranes of the chest.

Hydrothorax from Inflammation. — The form of the disease first to be considered, is most commonly ushered in with symptoms of pleurisy or pleuro-pneumonia. In acute pleurisy, after a chill or some premonitory symptoms, the patient usually has a sharp,

cutting pain in some part of the chest, worse from breathing, and especially from deep breathing. At first we generally find a hot skin, quick, hard pulse, and other symptoms of inflammatory disease. Aconite, Bryonia, and in other cases Sulphur, will often break up this form of disease in the first stage, and so little effusion is produced that the case does not come within the limits of this paper. But in many cases effusion is rapidly produced as the result of such an inflammatory process. When it is found to be present in any such case, we may be sure that it cannot be cured in a short time. And, in addressing ourselves to the work of selecting the proper remedy, all the elements of the case must be taken into the account.

If, with the effusion, there is high arterial action, considerable congestion of the substance of the lungs as evinced by the respiration, loudness of the respiratory murmur, and general symptoms of turgescence in the substance of the lungs, Aconite will be of service. I have been accustomed to the first or second dilution, a dose each two or three hours. But this remedy usually accomplishes all it can in a few hours, or days at most, and then another must be selected.

Bryonia is more often useful after Aconite, when the inflammation is more strictly confined to the serous membranes, and the effusion is more serum than lymph. It is not always easy to be sure of the exact nature of the effusion, but considerable confidence can be felt after a careful consideration of the case. If the inflammatory symptoms are not marked, if the case has some rheumatic features (for which we should select Bryonia) and pains of considerable severity after the inflammatory symptoms are removed, or if such pains are present from the first with only moderate inflammatory symptoms, we can give it with confidence of success. And again, in cases of pleuro-pneumonia, where the inflammation is of a rheumatic character, with hepatization of some portion of the lungs, and also so much effusion

as to be an important element in the case, Bryonia is still the proper remedy for these symptoms.

Sulphur is more useful than any other remedy for effusion of plastic lymph and serum into the cavity of the chest. The symptoms in such cases are those of intense inflammation of the serous membranes of some part of the pleural cavities. With pain in some part of the chest, the pulse is quick and sharp, face flushed, skin hot, with other symptoms of inflammatory fever of an active type; but these, on careful analysis, are seen to proceed from the local inflammation in the chest. With such conditions, valuable time is often lost, and the case not improved, by the administration of Aconite. The distinction mainly consists in the location and unmixed character of the attack. If the disease is principally confined to the serous membranes with such inflammatory symptoms, no time should be lost by the administration of Aconite, but Sulphur should be given at once. Examination of the chest will show that the inflammation does not extend into the substance of the lungs. When the lungs are not involved, the respiratory murmur is preserved, only more dull when heard through a stratum of the effusion. When the substance of the lungs is involved, the respiratory murmur is louder, or supplanted with crepitation, mucous râle, &c.

Sulphur is indicated for inflammation of these membranes when of such a quality as to produce increased secretion of both lymph and serum, provided it does not at the same time involve the substance of the lung. But in some cases the trouble comes on in a slower and more insidious form. A patient sometimes presents himself for treatment, stating that he has been ill for some days, or weeks even, but can give no account of any violent disturbance of his system. He will tell of feeling ill from a given date, of loss of appetite, weakness, difficulty of breathing, and generally of some pain, or at least soreness, in some part of the chest. Examination of the chest may show a pretty large accumulation in one of its cavities, with the sub-

stance of the lungs tolerably free from disease. In this form also, inflammation, though not of sufficient severity to produce a febrile reaction, produces the effusion. Whether originating this form at first, or left as a sequel after the removal of the more acute form of the trouble with Aconite, Bryonia, Phosphorus, or similar remedies, I have still found Sulphur a more useful remedy than all others.

It is well known to the profession that, when we cure the inflammation that produces effusion, the product of the inflammation is absorbed as the inflammation is removed, so that the remedy that is fully adapted to the inflamed state makes a radical cure. But in some cases the inflammation is removed only in its acute features, and the effusion is left with a sub-acute inflammation.

In these cases the fluid by its weight and bulk sometimes presses upon the vessels of the dependent part of the pleural sac, and thus, as a mechanical irritant, produce some degree of inflammation and irritation of its surfaces. In this way it becomes a cause of increased inflammation, and additional accumulation of serum.

In these cases also I know of no remedy so efficacious as Sulphur. But some care is needed here to distinguish these cases from more chronic forms attendant upon tuberculosis, and also from those forms that are produced by congestion, or arise from organic lesion of other and, it may be, distant parts.

These forms of hydrothorax I have frequently cured with the continued use of the tincture of Sulphur, three or four doses a day at first, but, as the improvement continues, one or two doses a day. Under the use of this remedy, I have had the satisfaction of seeing the effusion diminish steadily from day to day, until it was all gone. When the fluid was gone I have found that the spots of induration and the thickening in the membranes and lungs give way also, and the health becomes fully restored by the continued use of the same remedy. For this purpose I have

continued its use for several months at a time, and in some cases for even a year and a half.

When fluid is present in considerable quantity in some part of the chest, the side containing it is usually enlarged so as to increase the measure from the centre of the spine to the lower end of the sternum; or, as measured by comparing the depth of the two sides of the chest from front to back, it is found deeper than the opposite side, if that has no effusion. When the effusion is removed, the side where the effusion was, usually becomes as much smaller than natural as it had before been larger. During the presence of the fluid, the lung is compressed, and the lymph organizes upon its surface and binds it down, and the substance of the lung becomes thickened and its fibres adherent; so that, when the fluid is removed, the lung cannot expand at once, and the pressure of the atmosphere carries the outer walls of the chest in upon the diminished volume of the lung. For a long time the part of the chest thus affected is subject to pains and soreness, indicating an impaired or crippled condition in the diseased part. For all these symptoms also I have found Sulphur a very valuable remedy. By its continued use the adhesions are gradually absorbed, the chest expands, and the crippled lung resumes, to some extent, its former size and action. For the treatment of the constricted lung, a dose or two a day, or in some cases a dose each four or six days, has been given.

In the various forms of chest trouble for which Sulphur has been given, powders medicated with the tincture, or the tincture in solution, have been used satisfactorily. Dilutions, high or low, may be better, but the tincture has done me good service.

In dropsy of the chest, as in any other disease, the cause and the complications must always be taken into the account, to insure the selection of the proper remedy and conduct of the case. In this view we can see that the variety of circumstances and complications may make it possible that a large number of remedies may be applicable to this disease, under its various

modifications. Thus Arsenicum is indicated when the inflammation is mostly of a serous character, and attended with symptoms of debility and prostration. The urine is scant, not from disease of the kidneys, but from a suspension of their function through weakness and the action of disease in other parts. Among the most characteristic symptoms indicating the use of Arsenicum, decided crossness, ill-humor, and desire to injure or kill some one, are the most noticeable. But Arsenicum will seldom be found indicated where mildness, good-humor and hopefulness are the prevailing mental states.

Digitalis, on the other hand, is useful in cases that have a mild and hopeful mental state, but very rarely for effusion in the chest from an inflammatory origin. But the sphere of the action of this remedy is mostly confined to cases complicated with pericardial troubles, or else to the forms that arise from congestion, rather than from inflammation.

Rhus tox. is the remedy in cases similar to those cured by Bryonia, but with variations corresponding to those that mark the characteristics of the two remedies. I will only mention that the general condition of a typhoid state indicates its use in preference to Bryonia; and I leave a blank as to other particulars, to be filled up from a general knowledge of the distinctions between the two remedies, or from a careful comparison of the symptoms with the provings as given in our materia medica. In fact, the teaching cannot be too often impressed upon homœopathists, students or physicians, that in all cases of disease of any magnitude, after a careful analysis and rational understanding of our case as to its cause, structural changes, history, and complications, and of the remedies that have good reputation for such conditions, our duty is not fully discharged till we have carefully compared the symptoms of the case with those produced by drugs upon the healthy. This process is simplified by the previous digestion of the case in the mind, after which the

choice lies between one or two remedies, as, at most, but few come within the range of the investigation.

Juglans cinerea will cure dropsy of the chest having a rheumatic origin, if the rheumatism have bright spots of erythema as a complication, and other symptoms like those produced by Bryonia. I saw a case rapidly cured with a teaspoonful dose of the tincture made by putting the bark of the butternut into whiskey. Only two doses were used in the case. I have also seen the same remedy in tincture, two or three drops at a dose, used with success with effusion from acute inflammation in the left chest. Still, I think it is a remedy not often required in this disease.

Colchicum is the remedy in many cases, arising in gouty and rheumatic constitutions, where the lithates and other effete matters in the blood are determined to the serous membranes, and by their presence produce inflammation of these parts, and effusion. If Colchicum is indicated for the general constitutional state and peculiar rheumatic and gouty condition of the system, it will act to check the formation of the urates, and assist in their expulsion from the system. With the removal of this state, the inflammation subsides and the effusion is absorbed.

Nux vomica and Sulphur may be useful in a similar condition, but having its origin distinctly in the digestive organs. In the case of a man about fifty years of age, of full habit, who had led a very sedentary life with a full diet, the water filled the lower half of one side of the chest, with some in the other cavity, caused by inflammation of the pleura and lung on the affected side. As Aconite, Bryonia, Phosphorus, and Arsenicum had no effect, attention was called to the condition of the urine, which was so red as almost to seem bloody. A careful examination of it showed that it was filled with small, reddish crystals of uric acid. This fact led to the conclusion that the whole difficulty had its origin in a derangement of the digestive organs, by reason of which a large portion of acid matter was formed in

the stomach and bowels, and was mixed with the chyme and chyle, and carried into the circulation with the blood. Acting as a foreign substance in the blood, by a determination of a large portion of it to the pleural surfaces and lung, inflammation, and the consequent effusion and accumulation had been produced. Nux vomica and Sulphur were selected as answering to the requirements of the case, as thus viewed. That is to say, it was thought that these remedies, given alternately, would correct the derangement in the digestive organs, and stop the excessive formation of acids. The result proved the correctness of this view of the case, and justified the selection of the remedies; for the improvement commenced very soon after they were given, and proceeded to a perfect cure.

Phosphorus is hardly indicated in the treatment of hydrothorax. In cases that seem to be an exception to this, the inflammation commences in the substance of the lung and extends thence to the pleura, and is therefore more properly pleuropneumonia than dropsy of the chest. If the case commences in the parenchyma of the lung, and especially if it develops as an œdema and then extends to the pleuræ and cavity of the chest, Phosphorus, and in some cases Tartar. emet. in alternation with it, will cure the disease. With such symptoms, the cure seems to commence in the substance of the lungs, and from thence extends to the other parts.

Squilla cures inflammation of the pleura, when it extends over but a small surface but is sharp and active where present, and is attended with the usual symptoms of such inflammation, except that the inflammation is of so small an extent as not to produce a general feverish state. Effusions may result from such spots of inflammation, and are cured with the same remedy, if administered early. But the disease which Squilla cures does not usually proceed so far as to produce very large accumulations in the chest, for the reasons already stated.

Kali carbonicum cures a kind of pleurisy with symptoms sim-

ilar to those cured by Squilla, but in persons who have tubercles of the lungs, or a tubercular deposit that has preceded the pleurisy. With the cure of the inflammation the effusion is usually absorbed; and, as in the cases cured with Squilla, the effusion is not generally large in quantity. If the effusion becomes sacculated by adhesions of the adjacent pleural surfaces, it is another reason why the Kali should be chosen. But the action of this remedy is limited to cases that are moderate in their extent and severity.

It only remains to say a word of those cases of inflammatory hydrothorax which do not respond to the curative action of the medicines used, and for which other expedients come to be considered. Early in the course of such cases, the mind will turn anxiously to the question whether a mechanical removal of the fluid will be useful to the patient. Many plans have been devised for this purpose. The opening of an intercostal space and drawing the fluid through a trocar, and that of taking away a portion of the fluid by means of a pump and a small tube inserted through a similar opening, have been the two most common methods. It is my opinion that both are unadvisable so long as the fluid is not of so large a volume as to immediately endanger life, or until it has become purulent. In either case, opening the cavity of the chest is justifiable. But, when it is opened, I think a free opening and full discharge is much to be preferred to the partial pumping. Taking a little has many of the risks of taking all, and none of the advantages.

In cases in which the distention of the chest is very great, with bulging of the intercostal spaces, great difficulty of breathing, &c., there would be no question of the use of this measure. In other cases with less violence, but with symptoms of pointing and other evidences of purulent matter in some portion of the chest, the sooner the matter is evacuated, the better for the patient.

I have seen cases with fluid present in one side of the chest

to so large an amount as to cause a distention of the affected side, increasing by an inch and a half the measure around the side at the base, from the centre of the sternum to the centre of the spine, cured with proper homœopathic remedies, after lasting with some variation, for six months, the compressed lung was fully restored. In looking back upon these cases, it appears clear to me they would have been more likely to have resulted unfavorably if surgical aid had been called in. The same considerations will apply in other similar cases. To go into a full discussion of the reasons for these conclusions would carry me beyond the limits of this paper.

HYDROTHORAX FROM CONGESTION, or the congestive kind of dropsy in any other part, is the consequence of previous disease originating in organs or tissues more or less remote from the seat of the serous accumulation. Obstruction of the femoral vein causes a dropsical accumulation in the cellular tissue of the leg in phlegmasia dolens, common in puerperal women and not impossible in men. Dr. Todd says: —

"Pressure on a venous trunk or trunks will cause dropsy on the distal side of the pressure. This was illustrated long ago by the well-known experiment of Lower. This celebrated anatomist and physiologist tied the jugular vein of a dog, and found that the areolar tissue of the head and neck became enormously distended with serous effusion. Andral gives a case of dropsy of the peritoneum — ascites — caused by a tumor pressing on the vena portæ; the liver in this case was healthy, and the mechanical obstruction produced by the tumor was the sole cause of the effusion. Dr. Watson, in an admirable Essay on Dropsy communicated by him to the *Library of Medicine*, mentions a case of dropsy of the upper half of the body, which was occasioned by an aneurism pressing on the vena cava superior, the lower half of the body having been free from all effusion.

"A good example of this form of dropsy occurred in this hospital, and I shall refer to it more particularly, not only as a

good illustration of the production of dropsy by pressure on a venous trunk, but also to show you how a knowledge of this fact afforded material assistance in forming a correct diagnosis.

"Case 17. — The patient, a man of forty-three years of age, was admitted for an anasarcous state of the right upper extremity, with a similar condition of the left, although to a much less degree. The neck and face were very much swollen and puffy, and their veins large and distended with blood; and these phenomena were more developed on the right side than on the left.

"There was no dropsy elsewhere; the lower extremities, which would have been involved had the dropsy been cardiac, were quite free from swelling.

"The marked enlargement of the veins of the neck and of the upper extremities, especially on the right side, and the absence of any such enlargement in the veins of the lower part of the body, pointed to some obstacle to the return of the blood from the upper part of the body to the heart.

"If this obstruction had existed in the heart itself, it would have affected the veins of the lower half of the trunk to a greater or less degree. These, however, were intact. If, moreover, it had existed in the right vena innominata, the right side of the neck and right upper extremity would alone have suffered; but, although they were the parts chiefly swollen, the left were also involved. The obstacle must, therefore, have been such as would involve the superior vena cava, affecting at the same time, but to a slighter degree, the right vena innominata.

"Another point in this case aided in indicating the locality of the obstruction. The right lung was evidently much congested and the source of a pulmonary hemorrhage, the left lung being in a perfectly natural state. As there were no signs of any cardiac disease which could explain this phenomenon, it was interpreted as indicative of pressure on the right pulmonary veins by the same cause as that which produced pressure on the vena cava. The passage of the air into the right lung was obviously

much impeded, and, no doubt, by a similar compression at or near its root.

"These and other signs led to the diagnosis that the phenomena depended on the presence of a tumor near the right vena innominata and the root of the right lung, compressing that vein, the bronchial tube, and the pulmonary veins. The post-mortem examination showed that an aneurism, about the size of an orange, sprang from the posterior part of the ascending aorta just above the sinuses of Valsalva. The superior vena cava was embedded in the right wall of this tumor, and the right pulmonary veins and bronchi were compressed by it." *

I have seen dropsy of the arm produced by the pressure of a scrofulous tumor upon the axillary vein, and the same effect, in another case, by the pressure of a cancerous tumor upon the same vessel. Both patients were free from all other dropsy.

Any condition of the blood-vessels and heart that produces obstruction of the circulation of the blood in the veins of the chest may produce congestion and effusion into its cavities. Sometimes a rheumatic endocarditis produces a thickening and shrivelling of the mitral valves of the heart. With such defect, the blood is regurgitated into the left auricle at each systole, congesting the lungs; this may produce dropsy of the chest. Again, a rheumatic endocarditis may diminish the size of the apertures between the left auricle and ventricle, so that the blood cannot pass from the auricle as fast as it is poured into it; and the result is that the blood is obstructed in the auricle, and thence in the pulmonary veins and farther back in the lungs, producing congestion and engorgement. As in case of defect in the valves, so, from this state, there may come effusion in the

* Clinical Lectures on Certain Diseases of the Urinary Organs, and on Dropsies. By Robert Bently Todd, M.D. Philadelphia: Blanchard & Lea, —page 112. This work of Dr. Todd is one of great merit. In it the pathology of dropsy is better worked out than in any treatise within my knowledge.

chest. In the former case there is a regurgitation and bellows sound with the beat of the heart; in the latter the veins become distended by the diminished opening, which hinders the passage of the blood.

But, according to the author already quoted,* *dilatation of the right side of the heart* is the most fruitful cause of dropsy of the chest. The dilatation of the right side of the heart is often produced by either of the troubles just mentioned. If, from either of the causes alluded to, the lungs become engorged with blood, the right ventricle increases its efforts to force the blood through the lungs so as to overcome the impediment to the circulation. This increased action causes thickening and enlargement, first, of the right ventricle of the heart, and afterwards of the auricle also. Sometimes, according to the same author, when the enlargement of the right side of the heart is produced by the diminution of the aperture between the left auricle and ventricle, and the consequent enlargement of the right ventricle and auricle proceeds so far as to produce dropsy, then the left auricle, and afterwards the ventricle, begin to dilate and enlarge, and the contracted aperture becomes sufficiently enlarged for the normal flow of the blood through it, the lungs become freed from the engorgement, and the patient recovers almost or quite spontaneously.

If the dilatation is caused by disease of the mitral valves, this result cannot follow, for enlargement only renders the valves — already too small — more inadequate to perform their work.

Sometimes, in pericarditis, the two contiguous surfaces of the pericardium become adherent, and the heart and its investing membranes are firmly bound into one.

This hampered condition of the heart causes continuous and more vigorous action to carry on its work. The increased labor causes the heart to multiply its fibres, and increase its size.

---

* *Ibid.*, Lecture on Cardiac Dropsy, page 168.

But the dilatation is apt to destroy the harmony between the apertures of the heart and the valves that close them. Here, again, the conditions which may produce dropsy are present. But bellows sounds, and others indicative of the valvular defect, are not always present when there is valvular disease sufficient to produce this state. There may be considerable regurgitation of the blood from the ventricles into the auricles of the heart at each systole, upon one or both sides of it, and yet no bellows murmur. Any defect in the heart that acts as an impediment to the flow of the blood in the veins may produce this disease.

These are some of the mechanical causes of enlargement of the heart. There are others of a more external kind. Violent and prolonged physical effort may produce it. And when the fibres of the heart are weakened from any cause, the labor, which in its normal state would be easy, overtaxes it so much as to put its fibres upon a strain, and cause increased nutrition and enlarged growth. In another case, the strain seems to stretch the fibres, so that the enlargement is attended with thinning of the walls. This is a form most difficult to remedy. In rheumatic or idiopathic carditis, if the inflammation be moderate, in a degree varying but little from health, an increased portion of blood is sent to the walls of the heart, which roceives increased nurture, resulting in formation of new fibres and vessels in its substance. Thus, with very little impression on the person so affected, the heart gradually becomes enlarged with thickening of its walls. If the enlargement is of all its parts, so that the valves maintain their due proportion, but little trouble results. But in this form, also, the enlargement may be partial, destroying the harmony of action between the different parts of the heart, and thus laying the foundation for serious troubles of the chest in after-times. It ought to be added, that the organic changes in the heart usually exist for some time before dropsical difficulties arise from them; and, further, that considerable organic trouble, and even bad valvular disease, is some-

times borne with tolerable health for many years. The forms of heart disease that arise from inflammation are more amenable to medicine than any other; while enlargement, which comes from mechanical defects within the heart itself, is cured with great difficulty, if at all.

Disease of the liver, and especially a contraction of its capsule and atrophy of its substance, often produces ascites. So, also, tumors of any nature, within the abdominal cavity, which can press upon any of the venous trunks, may produce the same disease. Water may commence to accumulate in the abdominal cavity, and extend to the chest; but such forms of this disease do not come within the plan of this paper.

The dropsy of the chest that comes from kidney disease is more nearly allied to the inflammatory forms. In fact, the condition of the blood, from the effete matters retained in it, produces pleuritic inflammation and effusion, as has been before explained. And the form of hydrothorax that comes on as a sequel to a general dropsical state arising from kidney disease, as occurs after scarlatina, or Bright's disease, more properly belongs to general than special dropsy. So, also, the treatment of the general trouble, as a rule, helps the special. Thus, in the dropsy after scarlatina, the remedy that cures the kidneys carries off the water from any cavities where it may be accumulated; and, in Bright's disease, the remedy that does not help the kidneys leaves the dropsy untouched, which, unfortunately, is the usual issue of all treatment of this complaint.

The signs of dilatation of the right side of the heart, according to the authority before mentioned, are dullness on percussion over a space much larger than natural, beating of the heart at the scrobiculus cordis, and pulsation of the jugular vein. The pulsation of the jugular vein (if we are sure that we do not mistake the pulsation of some contiguous artery for that of the vein) is conclusive evidence of dilatation of the right side of the heart, as no other condition of the heart can produce this phe-

nomenon. If we press upon the jugular vein (remembering the above caution), and if the pulsation continue on, only on the distal side of the point of pressure, we may infer that the pulsation is due to the transmission of the pulse from the heart through the circulation, and especially if it be perfectly synchronous with the beat of the heart. But, if the vein continues full between the point of pressure and the heart, then we know, whether there be pulsation or not, that the vein has received blood from its cardiac side; and this it can only do by regurgitation from the right side of the heart. Before we make sure that the beating of the heart at the epigastrium is caused by enlargement, we must, while one hand receives the blow there, with the other examine to see that it beats at the normal place under the left breast. Without this precaution, we may mistake a displacement of the heart downwards for enlargement. With enlargement of the heart the force of its stroke upon the head or hand, when placed over it, is much increased.

The symptoms of the dilatation of the heart, with the hydrothorax attendant upon it, are, difficulty of walking, or ascending a hill or stairs, palpitation and irregular beating of the heart coming on at times but leaving the action steadily increased. The difficulty of breathing varies with the amount of fluid in the chest, and with the degree of congestion in the lungs. At times the breathing is only comfortable or tolerable in an erect or sitting posture; and this is one diagnostic mark between an effusion in the chest arising from inflammation and one arising from congestion. In cases that arise from inflammation of the pleuræ when the lungs are unaffected as to their parenchyma, the dyspnœa is very much less than when it arises from the congestive form. With obstructed veins, the congestion begins at some point in the lungs; it then creeps through the lungs; and when it becomes considerable, not only is the serum poured out upon the serous membranes, but mucus is poured out upon the air-tubes; and then to the difficulty arising from the labored action of the

heart, from the compression of the fluid upon the lungs, and from their general congestion, is added obstruction of the air-tubes by the accumulated mucus: this produces paroxysms of mucous asthma, as frightful and distressing as any that can be found. The congestion of the lungs without this produces many pains about the chest, and often compels an erect posture for many days and nights together. Fluids in the cavities of the chest do not alone produce all these symptoms.

Water in the lower extremities, and afterwards in the abdominal cavity, is often the result of the chest effusion. It may extend to the upper extremities and face, but only towards the last stage. The swelling of the lower extremities sometimes comes on rather early in the disease, when the excess of fluids is small in the chest. The reason for this I am unable to explain. Sometimes the swelling of the feet and legs is so great that it seems right to make some openings through the skin somewhere about the feet or ancles, from which large quantities of water will escape. But the tissue about the apertures gradually inflames, and closes them against the water. In a short time the legs swell again. But the areolar tissue has become hardened by the adhesive inflammation following the first removal of the water, and puncturing the skin the second time is attended with but small discharges.

Prognosis.—Hydrothorax of congestive origin, except in cases from a narrowing of the apertures between the left auricle and ventricle of the heart, which may become restored by general dilatation of the heart as already explained, is almost always fatal in the end.

As has been shown before, the inflammatory form, if not complicated with organic changes in the heart or lungs, is often cured. So the cases which arise through a general dropsy are often cured if the general dropsy is. But the large class of cases which arise from enlargement of the heart is almost always fatal. This is so, because the enlargement is usually without

thickening of the walls, but rather with a thinning of them. Therefore it is very difficult to cure the enlargement with thinned and weakened walls, while they are under the same constant strain that has produced the dilatation. The regurgitation of venous blood keeps the lungs constantly congested. The congestion is a constant obstacle to the free passage of the blood through the lungs; and, to overcome this, the heart is constantly laboring with a force beyond a safe working standard. But, although a cure cannot be looked for, there are many cases in which a very valuable relief and palliation of the suffering may be obtained from judicious treatment, and in some cases the life may be prolonged for many months, and perhaps a few years.

It ought to be said here that we often cure cases of disease of the heart that are uncomplicated with dropsy of the chest. If we are called to treat enlargement of the heart of inflammatory origin, with thickening of its walls, and if the disease, confined to the heart, does not affect the lungs, a cure is often made with homœopathic remedies.

I can call to mind several cases of this kind, and our journals have truthful reports of other such cases. But this form should be carefully separated from the other, if we desire to make a good prognosis.

Treatment. — When called to examine a person with effusion in the chest, it is very important to decide the nature of the difficulty we have before us. To this end a careful examination should be made, to see if the symptoms are descriptive of an inflammatory affection. The lack of any pleurisy in the early history of the case, and the absence of inflammatory affections of the lungs, alike point to the congestive form. When we have decided that we have a cardiac dropsy of the chest, we select a remedy or remedies that seem best suited to all the symptoms.

Arsenicum is undoubtedly useful in some forms of chest dropsy. Some moderate enlargements of the heart are cured by it. It is adapted to the weakened condition of the system which

attends some of these cardiac troubles, and also to some serous inflammations and some pulmonic congestions. I think it better adapted to enlargement of the heart commencing upon the right side, rather than to valvular disease of the left side and to the difficulties attendant upon such enlargement. If the difficulty arises from chronic bronchial trouble or emphysema of the lungs, and thence extends to the heart, Arsenicum will be likely to render some good service. But I must say that I have never seen good effects from this remedy in a case of well-marked dropsy of the chest from valvular disease, or enlargement of the heart. Arsenicum seems to fail to remove the congestion of the lungs attendant upon this form of disease; and, unless this is accomplished at the same time that the heart is relieved, this congestive condition soon overcomes all improvement that the remedy has produced on the heart.

It must be borne in mind that the congestion and engorgement of the serous membranes are the last steps in the production of the serous secretion that constitutes the accumulation in the chest. When any remedy removes this engorgement, the excess of secretion ceases, and absorption at once commences. In cases where the secretion of the urine is very scanty, not from any disease of the kidneys, but because of the disease in the chest, as soon as the chest congestion be removed, the urinary secretion will at once commence, and a large quantity of water be evacuated. So a remedy, to act palliatively, must in some way remove this state of the membranes; and this, Arsenicum mostly fails to do.

Tartar. emet. and Phosphorus have acted well for me in this disease. In one case, of a lady with enlargement of the right side of the heart, as evinced by the beating at the scrobiculus cordis and under the breast at the same time, with dullness over the region of the heart and covering a larger space than natural, bellows murmur, throbbing of the jugular veins, congestion of the lungs, great difficulty of breathing, inability to

lie down, water in both pleural cavities, ascites, and anasarca mostly in the lower extremities, these two remedies were given, (after Arsenicum, Digitalis, Kali hydriodicum, and Sulphur had failed), because the congestion of the lungs had become severe, and was attended with hæmoptysis and violent cough. Their action upon the lungs was soon evident in relieving the pulmonary congestion: absorption of the fluids in the chest soon began, and was followed by the disappearance of the water from the abdominal cavity and extremities. During this process, a large quantity of water was passed by the kidneys, and the bloated figure became shrivelled and lean. After the improvement the patient was able to make a journey of two hundred miles, and for a time kept off the threatenings about the chest with the same remedies, used alternately, — Tartar. emetic.[15] and Phosphorus[3] in solution. But, after some six or eight months of comparative comfort, another attack came on and proved fatal.

Digitalis has considerable effect upon enlargement, inflammation, and irritability of the heart. With some forms of carditis and of pericarditis, it is a most excellent remedy. If the difficulty be confined to the heart itself, it will, when indicated, make a full cure without other medicine; and, if the pulmonary congestion and effusion are only moderate in extent, after the cardiac states are improved, they may pass away, at least for a time, under the use of this remedy. But, as is the case with Arsenicum, it does not seem to control the pulmonary congestion, and hence, where this is present, it fails to be even a good palliative. If the effusion be of inflammatory origin and confined to the pericardium, Digitalis will often cure it; and, if the water extend from the pericardium to other portions of the chest without involving the lungs, Digitalis may cure the trouble there also. In cases like these, I have seen Digitalis and Arsenicum (the former in tincture, and the latter in the 3d decimal trituration in solution, a dose each two or three hours alternately)

have excellent effect. In some cases of this character, but mild in degree, these remedies have been used for some weeks together, a steady but slow improvement going on to a full cure. But it will be noticed that this state is more properly pericarditis, or hydropericardium, than hydrothorax.

But, when we are called to a patient in great distress from pressure of the serum upon the lungs, with congestion of the lungs, and, it may be, spots of inflammation, cough, or mucous asthma, or bloody expectoration, labored action of the heart as though the whole functions of life would be destroyed by the many impediments to further action, and Arsenicum, Digitalis, Phosphorus, and Tartar. emet. have had no effect, or we have no hope from the use of any or all of them, what can we do with so great a demand for immediate help? The asthmatic breathing and cough may be a little palliated by Lobelia inflata, Ipecac, Camphor, Cannabis, Aconite, or some other remedy. But the help from any or all of them will be unimportant; for the continual congestion of the lungs, with pressure upon them, soon overcomes all improvement of this kind, and leaves the patient imploring us for more help. The prescription that I have seen of the most service in these cases, and which has acted with promptness, will hardly meet the approbation of those of my homœopathic brethren who have faith in infinitesimal doses only. But, while I am willing to endure all the blame that is put upon me, I shall be faithful to the history of this disease, so far as I attempt to give it, and equally as ready to admit my failure as to chronicle my success. And, if any who object to the treatment that I am about to give will show me how to cure or palliate as well with a single remedy, or with small doses of one or more remedies, I shall be ready to adopt their improvement and leave this method. With symptoms such as I have given, a solution of Kali hydriodicum, one ounce, in two ounces of water, administered in doses of a teaspoonful, to each of which is added ten drops of the tincture of Digitalis; a dose each eight, or twelve

hours, directly after eating. If this prescription is given, it will be well to observe this condition (using it after meals), or else the medicine may disturb the stomach. And it is well for the patient to take a swallow of elm or flaxseed tea in the mouth before taking the medicine; otherwise the mouth and throat may be made sore by it. This prescription will often relieve the congestion of the lungs, in some measure, within a few hours; soon after this the mucus, asthma, and cough will grow better, the urinary secretion take large portions of water from the system, and the heart become comparatively easy in its action. In one case, the attacks, which without help must have soon proved fatal, were removed by this prescription; and then the patient would go on for several months, comparatively well; when another attack would come, to be relieved by the same remedies. She went on in this way for some three years before the organic changes were so great as to render all remedies useless, when death closed the scene. In another case help was obtained in the same way, for a year and a quarter, before the same termination.

Case. — On the first of December, 1867, I was called to see Mr. D., aged sixty, taken suddenly ill, at a vestry-meeting, with distressed breathing, violent beating of the heart, profusely sweating, and pulse very weak and quick; death seemed probable, unless he could have speedy relief. Arsenicum was given, and he gradually recovered from the violence of the attack, and was carried to his house.

The history of the case showed that he had suffered from some disease of the heart for some time. For two months he had had difficulty of breathing when walking, going up a hill or stairs. Unable to lie down, or bolstered to nearly a sitting posture to obtain a little rest in bed, he would be awakened at one or two o'clock in the morning with violent distress for breath, pain and pressure in the lungs, violent beating of the heart, some throbbing in the jugular vein, and pains in the arms, half

way between the shoulder and elbow, as though firmly bound with cords. I have observed this symptom in other cases of heart disease. It seems to be caused by enlargement of the right side of the heart, by which the tricuspid valves are rendered defective in their operation, and the venous blood is thrown back upon the vena cava superior and inferior. From the vena cava superior the blood was forced back upon the axillary veins, causing this feeling. His heart beat strongly at the scrobiculus cordis, and at its normal place under the left breast ; dullness on percussion over the heart for a space twice as large as natural. The rhythm of the heart is changed, so that the second sound is nearly as long as the first. He had Arsenicum for a few days, then Arsenicum and Digitalis in alternation, with little effect. As he had had but little sleep for some weeks, and that little only obtained after strong potions of whiskey, (the patient had been temperate in his habits,) I gave him Digitalis in ten-drop doses at night, omitting the whiskey, and he slept better. But still the disease went steadily on, the heart laboring more violently, and the difficulty of breathing becoming greater. The feet and abdomen began to swell, and some water appear in the chest. I now decided to give the prescription of Kali hydriod. and Digitalis, as given before. The effect was very satisfactory. Before the end of the day he was better. He soon obtained sleep while sitting, and then when lying down. The swellings disappeared, and he gradually got out and attended to some business as a watch-repairer. The diagnosis was: enlargement of the right side of the heart with thinning of its walls, regurgitation of the blood back upon the venous system, causing dropsy of the chest and extremities. The prognosis (that he would have some relief, but that his troubles would gradually return, and after a time terminate fatally) was made known to his friends.

During some intervals of improvement he has taken Bromine, Asparagus, Cactus, and some other remedies, without effect.

These intervals have lasted but a few days, when he has been obliged to return to the Kali hydriod. and Digitalis; and, though usually one dose a day has been enough, during his more severe sufferings he has taken three doses a day.

The operation of these remedies I have attempted to explain by supposing that the direct action of the Kali hydriodicum was upon the vessels of the lungs, causing them to contract and force the excess of blood out of the distended veins; and that the Digitalis soothed the excited and over-taxed fibres of the heart, so that it was brought into a condition more in accord with the disgorged lungs. In the form of heart trouble that is caused by a partial closing of the apertures between the left auricle and ventricle, producing obstruction to the return of the blood from the lungs, Digitalis in considerable doses ought to give relief.

I have not found either Kali hydriod. or Digitalis as useful alone, either in doses as large as mentioned, or in smaller ones, or in alternation, as when given together. And though the age, constitutional state, and susceptibility would modify the dose, I think but little effect will be had from these medicines unless given in a full dose; but, when given as directed above, the palliative effect has been very satisfactory.

Bromine, Lachesis, Naja, Asparagus, Cactus, Spigelia, Aurum, Natrum mur., and Sulphur, in tincture and dilutions up to the 200th, have all failed me in hydrothorax.

It is of great importance, in this as in all other diseases, to get from the patient the facts, instead of the imaginings; and hence the well-weighed symptoms should be collected from the bedside, instead of our theories of what ought to be the proper sequence of events. Because we have a case of dropsy that has come on after scarlatina, we are not justified in taking it for granted that it has originated from kidney disease according to the common theory, without a careful analysis of the case, especially if curative effect does not come from the use of reme-

dies adapted to cure dropsy originating in disease of the kidneys. I give the outline of a case now under treatment, in which kidney dropsy was at first suspected; but a more full examination and development showed the chest symptoms to be the key to the disease.

Case. — Child of Mr. J., six years old. Had scarlatina in the country three weeks ago. Saw him May 16th. At that time, though about the house, he was bloated in the face, lower extremities, and abdomen, which had some fluctuation on percussion. Urine scanty and high-colored. He had Apocynum can., a dose each two hours.

May 18. — No better. Bloating increased. Bell. and Apocynum alternately.

May 20. — Some sore throat; other symptoms no better. Mercurius solub. and Apocy. alternately each two hours.

21st. — Found the patient considerably more dropsical; pulse 130; breathing quick and short, as in pneumonia, though he has little cough. Examination of the chest showed that the left lung was congested and the heart laboring violently, as I thought, to force the blood through the obstructed lungs. The urine was more abundant and lighter-colored than two days before. ℞ Phos. and Tart. emet. in solution, a dose each two hours, alternately.

22d. — Better. Slept well; breathing better; the respiratory sound not so harsh and loud through the left lung. The bloating about the face is less, abdomen smaller, legs about the same; pulse 106, and much less excited. Continue the Phos. and Tart. emetic.

23d. — Better. The bloating is less, though the abdomen is not so much improved as other parts. Pulse 92, and more natural. Less loudness of the respiratory murmur in the left lung. ℞. Phos. and Tart. emetic as before.

24th. — Better in all respects. Urine quite abundant. Continue the same remedies, a dose each three hours.

25th. — Improving in all respects. To continue the same remedies each three hours. On the 27th, he had Sulphur[3] every three hours; and, on the 29th, Bryonia for a little cough. He was discharged convalescent June 1st.

The forms of this disease which arise from affections of the liver with water forming in the abdominal cavity, and then passing up into the chest, or similar results from diseases of the kidneys, will not be considered in this paper farther than to say that the original trouble must first be cured; and, if it cannot be, then the chest disease will be incurable also. The dropsy of the chest that arises from aneurismal, cancerous, and other tumors pressing upon some of the large vessels of the abdomen or chest, are very much beyond the reach of medicine, and are not considered here.

In conclusion, allow me to say that I give this effort to the profession, all imperfect as it is, confident that some of its most important doctrines are correct and will repay attention and further investigation. The effort which I have made to bring them clearly before my mind, in order to state them clearly to others, has been of much service to me; and I have no doubt that a careful study of the subject by my medical brethren from the few hints here given, will lead to a very good understanding of the subject; and that the fruits of the treatment, so scantily gleaned, may result in the relief of some stricken fellow-creature, is the wish of the writer.

VIII.

THE EPIDEMIC OF YELLOW FEVER AT NEW-ORLEANS IN 1867.

BY WM. H. HOLCOMBE, M.D., NEW ORLEANS, LA.

It is not probable that many members of the American Institute of Homœopathy will ever have occasion to treat a case of yellow fever; but no physician who loves his profession, and takes pleasure in the study of natural phenomena, can fail to be interested in the history, symptoms, and character of this extraordinary and formidable disease. In the history of medicine, its successful treatment by homœopathy will take rank with the triumphs of the same practice in Asiatic cholera. We have competed with the old school, over and over again, in combating these dreaded scourges of the human race; our laurels are found in the increasing faith, respect, and gratitude of the most enlightened public. Our ignominious failure is always loudly predicted at the beginning of these epidemics; but the voices of derision at infinitesimal doses die gradually away into faint eulogies of the powers of Nature in curing homœopathic patients.

It is not my intention to go over the same descriptive and speculative grounds which I attempted in my extended monograph on the great epidemics of 1853 and 1855. With increasing years, our tendency to philosophize diminishes; and our minds look eagerly around, not so much to adjust our practice scientifically to our theories, as to seize the most available and successful means to our ends. I propose to communicate here

some ideas, almost wholly practical in their nature, which were suggested by my large experience in the epidemic of 1867.

There never yet was an epidemic of yellow fever in which many people, and some physicians, did not say, "This is not yellow fever at all." With forty thousand yellow-fever cases around us last year, many physicians — creoles, particularly — saw no deaths but those from "pernicious fever"; and it became quite common to hear the disease spoken of ambiguously as "the prevailing epidemic." Why this hesitation and uncertainty? Simply because yellow fever has what may be called the widest and most varied phenomena of symptoms of any disease in the world. Moreover, it is continually changing its type, and, in some measure, even its form. Yet, through all its protean shapes, its fundamental character may be detected, like a musical air, keeping its steady way through the most eccentric variations.

Yellow fever formerly ravaged the cities of New York and Philadelphia as severely as it now does New Orleans and Havana. Since 1820, the disease has not appeared in the Northern cities, except to a very limited extent along the wharves to which it had been brought by shipping directly from the tropics. Previous to 1850, the equatorial line was regarded as an impassable barrier to the yellow fever, that disease having never been observed in the southern hemisphere. Now it is common in all the South American ports north of Buenos Ayres.

Within the memory of living physicians, the yellow fever never attacked the native creole population, never extended beyond the suburbs of cities or towns, never attacked the same person a second time, never occurred in the pure negro race, and rarely seized upon children. Now it attacks children, negroes, creoles, and acclimated persons indiscriminately. A first attack is no certain security against another, and the second attack is sometimes the worse of the two. It visits hundreds of places on the lines of public travel where it was

never known before, and penetrates miles away into the quiet and privacy of rural retreats. To compensate for this vast increase in the area of the disease, it has diminished in virulence to an extraordinary degree. It has been estimated that twice as many cases occurred in New Orleans in 1867 as in 1853, and still there were only one-third as many burials. Physicians claim, and the public assent, that this is the result of more rational treatment, and this is no doubt partially correct; but those who have witnessed the epidemics since 1853 will concede the vast increase of mild cases in latter years.

Yellow Fever is a disease of such varied symptoms that a prompt diagnosis is sometimes extremely difficult. It has been remarked that, if a physician unacquainted with its phases were introduced into a yellow-fever hospital, he might very easily conclude that half a dozen different diseases were presented for his inspection. Hence the great uncertainty which prevails at the beginning of an epidemic, as to whether it be yellow fever or not. Even physicians of the greatest experience hesitate to commit themselves in the affirmative, until they can point to death with black vomit, the only unquestionable test of it, in public opinion.

What is the cause, what is the hidden law, which regulates these phenomena? Do not these curious changes of place, type, and general character of this remarkable disease, and especially its greater diffusion and increasing mildness, warrant the hope that it will become gradually merged into the regular endemic diseases of the country, and disappear from the tropics as a terrible epidemic?

The Fever of 1867 began in June, slowly increased in July, became rapidly epidemic about the fourth week in August, and raged with great fury during September and October. It decidedly diminished from the first of November, but still did not totally disappear until about the middle of December. I met with no case in my practice resembling yellow fever until the

middle of August. Early in August the occurrence of profuse hæmorrhage from the kidneys in a case of bilious remittent prepared me to expect the advent of that formidable disease, in which hæmorrhage and jaundice are so frequently concurrent.

The striking peculiarities of the epidemic of 1867 were the following: —

The number of cases was enormous, greater in proportion to population than was ever seen before;

The general virulence and consequent mortality were far less than in any previous epidemic. The cases were variously estimated from 40,000 to 60,000. The burials were about 3,100, exclusive of U. S. troops, among whom the mortality was far higher than among the citizens;

A great many deaths occurred amongst the native creole population of French descent, — a most unusual thing, but now firmly established by the statistics of Dr. Delery, himself a creole;

The disease was extraordinarily severe among children, many of them dying with black vomit. This distressing peculiarity was universally remarked;

It was milder with negroes than in 1853 and 1855;

The type of the disease was rather nervous, rheumatic, or neuralgic, than bilious. I mean that it leaned to the form of the break-bone fever, or dengue, rather than to that of the bilious fevers of malignant character, which the yellow fevers of 1853, '55 and '58 more closely resembled. This was no doubt the reason why the fever was so very widely diffused, and so much more manageable than in the epidemics above mentioned;

It was both preceded and followed by many cases of cholera and dysentery;

The proofs of its direct importation and contagiousness were less striking and satisfactory than they had been in some previous epidemics;

The number of second attacks was unusually great. The re-

coveries after black vomit were more frequent than ever before; the cerebral, and not the abdominal, congestions proving the most fatal;

Lastly, the disease lingered longer and later than usual. Even in December, and after quite cold weather, fatal cases occurred. The doctors and the papers were too hasty in announcing that it was safe to return to the city, and more than a hundred burials were the consequence.

I treated about three hundred and fifty cases which might be claimed as yellow fever cases. Deducting fifty cases for errors of diagnosis, for those who changed practice, and for very trifling attacks, will leave three hundred cases of unquestionable yellow fever which were under my treatment. The mortality was only seven, and it included no child under fourteen years of age. Ten or twelve of these cases recovered after black vomit, and many more after brown vomit. Many of these cases presented the most formidable symptoms of yellow fever: hæmorrhages from the nose, gums, bowels, or uterus; jaundice, scanty urine, cerebral congestions, raving delirium, or that most annoying and dangerous symptom, an unconquerable pervigilium.

One of these fatal cases was that of an United States officer of good habits and splendid physique. It was one of those rare cases of frightful blood-poisoning, proceeding, unchecked by art and almost unresisted by nature, to a fatal issue on the fourth day. It was a characteristic specimen of the insidious and destructive form of the fever so well described by the old West-Indian writers, especially Dr. Robert Jackson. One case was that of an Irish servant girl, several years in the country, — a case apparently progressing finely to the fifth day, and then suddenly and unaccountably fatal from fright and nervous exhaustion. A third was a merchant recently from the Northwest, treated, by request and under great disadvantages, in an allopathic hospital (Hotel Dieu). He had no black vomit, and made a long but vain struggle against cerebral and typhoid

symptoms. The remaining four deaths were of persons of Southern birth, and who had very recently come from the country. Indeed, the last fatal case, and the severest I had witnessed during the whole epidemic, occurred near its close. It was that of a young gentleman who had spent the season over the Lake in perfect health, and was attacked on the very day of his return. The most hideous features of the disease developed themselves with awful intensity.

So little does residence, in malarial regions subject to bilious fever, acclimate one against yellow fever, that persons coming recently from the small towns and rural districts of the South into cities where yellow fever prevails, are apt to contract the disease in its most dangerous form. It is equally true that when yellow fever is taken from New Orleans into the small towns and villages, it presents a malignity and fatality rarely seen in the city. This is a singular point, and all the explanations hitherto offered, including inefficient nursing and improper treatment, cannot entirely account for it.

Nothing new or important has been added to the pathological anatomy or the theoretic pathology of yellow fever in the last decade. La Roche's immense volumes, issued thirteen years ago, monuments of industry and learning, have not been superseded by any allopathic writer suggesting better theories or sounder practice. Have our allopathic friends made here a single positive advance? Have they given us a single new remedy of unquestionable value? Have they modified the course and termination of yellow fever by a single measure of unimpeachable utility? Their intelligent and candid adherents will answer, No.

Their treatment has become far more rational, and their success greater, not by learning, but by unlearning,— not by discovery, but by renunciation. The lancet safely rests in its sheath, to which the anathemas of the more intelligent of its former advocates have consigned it. *Requiescat in pace!*

Calomel, which the Southern physician still ignorantly regards as a specific against bilious fever, has been fairly abandoned. The yellow suffusion in this disease is not necessarily connected with any biliary derangement. It rather resembles the yellowish, greenish coloration of the capillaries from extravasated blood, and is generally due to morbid chemical changes in the hæmato-globuline, or coloring matter of the red globules. The jaundice of bilious fever and the jaundice of yellow fever differ as much in their causes, course, and effects as the two diseases themselves differ. The allopathic scalpel has discovered this, and none but the most veritable "old fogies" now think of mercurializing a patient jaundiced with yellow fever.

Under the untenable hypothesis that yellow fever is only a high grade of malignant bilious or of pernicious and congestive fever, a resolute attempt was made many years ago to abort it or modify it by heroic doses of quinine. As much as a hundred grains were given in a single day. The only thing that can be said in favor of this abominable treatment is, that some patients are known to have survived it. This theory raised great expectations on its first announcement, but it has been discarded by the mass of educated physicians. Yellow fever is not an intermittent or remittent disease, nor does it spring from malarial causes. Quinine has a certain decided homœopathic value in this disease, not from its symptom of periodicity, but from its power of producing hæmorrhages and intense nervous wakefulness and excitability.

Deprived of their antiphlogistics, their mercurials, and their antiperiodics by repeated ill-success in their use, our old-school friends, in conformity with their new zymotic and antiseptic theories, drenched some of their patients with sulphite of soda and surrounded them with atmospheres of carbolic acid. The result was — nothing.

Allopathic practice, then, in yellow fever has only improved by the process of exclusion. It has now been reduced to the

treatment long since adopted by the old creole nurses, — a dose of castor-oil and a mustard foot-bath in the beginning, and some hot sudorific tea, and an occasional sedative to procure sleep or relieve pain. We congratulate the friends of humanity on the brilliant achievements of the monopolists of medical science!

What has homœopathy, with its guiding law, "*similia similibus*," its hundreds of new remedies unknown to allopathic literature, its ethereal doses, and its kindly partnership with Mother Nature herself, — what has homœopathy done for the victims of this great tropical fever?

Much, very much. In the great epidemics of 1853, '55, and '58, Dr. Davis, of Natchez, Miss., and myself, demonstrated, by a practice including over a thousand cases and a mortality little exceeding *six per cent*, that Aconite, Bryonia, and Belladonna in the first or febrile stage, and Arsenic, Lachesis, and Argentum nitricum in the second or stage of prostration, very greatly mitigated the sufferings and diminished the fatality of yellow fever.

Since that period I have been enabled not only to add other remedies of unquestionable value, but to define more accurately their specific action, increasing thereby the scientific precision with which yellow fever may be treated. Although not exclusively Hahnemannian in my theory and practice, I here acknowledge with deep gratitude the beneficial influence which the doctrines taught by Hering, Dunham, Guernsey, and others of the pure Hahnemannian school (so called), had upon my mind as to the study of drugs and their applications in disease. Truth may lie in the middle, but it touches always on both extremes.

There is of course, for yellow fever, no specific, in the sense of an infallible cure for this disease. It is the tendency of true science to individualize the cases of disease more and more, and to treat each case upon special and not general principles; and still there are certain medicines which correspond so very extensively to the symptoms of certain diseases that they bear

a large part in their cure, and may be sooner or later called for in almost every case. We have discovered a remedy which promises to bear the same curative relation to yellow fever which Belladonna bears to scarlet fever, Mercurius corrosivus to dysentery, Phosphorus to pneumonia, and Sulphur to skin disease.

This remedy is the virus of serpents, with two forms of which, Lachesis and Crotalus, we have become familiarly acquainted. In studying our materia medica for the great epidemic of yellow fever in 1853, neither of us having ever treated the disease homœopathically, Dr. Davis and myself concluded that the snake-poisons, if the homœopathic law was true, ought to play an important, perhaps the chief, part in the treatment. And, in my first essay on this disease, I claimed for Lachesis a very great curative value in the worst forms. Previous to that time, homœopathic physicians seem to have prescribed, as many still do, on the hypothesis that yellow fever was only a more malignant form of the common bilious and malarial fevers of the climate.

In 1854, Dr. Humboldt announced to the Cuban authorities that, by a series of experiments conducted for nine years, he had discovered that inoculation with the poison of a serpent would prevent an attack of yellow fever. He was led to the discovery by observing that galley-slaves brought from Mexico to Vera Cruz, who had been bitten by some viper on the way, always had decided symptoms of yellow fever. Reasoning analogically from the facts of vaccination, he inferred that the serpent virus would prevent yellow fever. A committee of medical men (allopathic) was appointed to examine the claim, and a great number of persons, chiefly soldiers and sailors fresh from Spain, were inoculated with serpent-poison. Two conflicting reports were made on the subject. The effects produced by the inoculation were so severe, and the preventive influence so imperfectly established, that the measure was abandoned, and

has been almost forgotten. The inoculation seemed to be about as valuable in preventing yellow fever as the administration of Belladonna has been found in warding off the scarlet fever.

The inoculation, however, gave a splendid lesson in toxicology, which the homœopaths have not improved as they should, and which is valueless to those whose minds are closed by allopathic doctrines to therapeutic truth. The poison of serpents produces on the human system a pretty fair picture of genuine yellow fever in its most common forms; even including hæmorrhage from the gums, jaundice, and suppression of urine.

Dr. S. Weir Mitchell, in the Smithsonian Contributions to Knowledge, has made some admirable researches upon the venom of the rattlesnake, Crotalus horridus. He calls particular attention to the extraordinary resemblance between the artificial disease produced by the Crotalus and the yellow fever. Dr. Neidhard, of Philadelphia, has written a little volume on the efficacy of Crotalus in yellow and malignant bilious and remittent fevers. Although the cases he reports as yellow fever may be fairly criticised, and a verdict be rendered against him, yet his volume is instructive and suggestive; and he deserves great credit for having grasped with a truly philosophical spirit an idea of the vast service yet to be rendered to humanity by impressing the poison of the serpent into the service of man.

I made two great improvements in the use of Lachesis and Crotalus in the epidemic of 1867; using the remedy promptly, and at a high attenuation. I had formerly waited for the symptoms of blood-poisoning, more especially, to declare themselves, before resorting to the serpent virus. I conducted many cases last year to a successful issue by giving these medicines from the beginning. I think I also discovered that Lachesis is especially adapted to the nervous elements, and Crotalus to the vascular elements, of the disease; Lachesis to the nerve-poisoning, Crotalus to the blood-poisoning, — Lachesis, therefore,

more prominently in the first stage, Crotalus in the second stage, or that of exhaustion, hæmorrhage, and jaundice.

Secondly, I made use of these remedies at the 30th attenuation, in which, in my opinion, they are far more efficacious than in the lower or grosser preparations. The poison of serpents may be swallowed with impunity, may be eaten like bread, or like the white of an egg, from which it is almost indistinguishable in chemical composition. In this it resembles quicksilver, silica, platina, charcoal, and other substances, which in the crude form are quite inert, but which, when triturated, succussed, and carried up to infinitesimal forms, become vivified, as it were, with a new power, drop their disease-producing qualities, and are potentized only in the direction of cure.

I dissent also from the common idea — sanctioned by Dr. Neidhard — that the triturations with sugar are preferable to the alcoholic tinctures. Dr. Mitchell proves that the virus of serpents is not neutralized by alcohol. Whiskey does not cure snake-bites by antidoting the poison, but by stimulating the heart to resist its terrible, paralyzing action, until the emunctories can eliminate it from the system.

It may be asked, How do we know that these infinitesimal doses of Lachesis and Crotalus exert any curative influence in yellow fever? We can only say that we believe that medicines, given in accordance with the homœopathic law, act in the line of the disease itself, insensibly modify the operations of the morbid cause, and finally neutralize its power. We can only prove the effect of these medicines by seeing hundreds and thousands of cases recover under their use, without the nervous prostration, the precordial anguish, the hæmorrhagic tendency, the jaundice, &c., which characterize the full action of both the remedy and the disease. We are thus charged by our opponents with having very many mild cases. They are mistaken. We are no especial favorites of Fate or Fortune or Nature. We have simply *made them mild.*

Another test of their efficacy will be found in the comparative success of homœopathic physicians who take the more correct theory of the jaundice of yellow fever; viz., that it is due to chemical changes in the coloring matter of the blood, resembling those produced by serpent virus, and not necessarily or even frequently caused by functional or organic disturbances of the stomach and liver. Those who take the latter view, and prescribe Bryonia, Nux vomica, China, Mercurius, &c., in the second stage, ignoring Lachesis and Crotalus, will have a longer list of deaths to show; for, in homœopathy as in allopathy, a sound pathology is the surest basis for a successful practice.

When the virus of serpents is introduced into the circulation of pigeons or of other small animals, it sometimes destroys life in a few moments. They merely stagger and die; and the physician, armed with scalpel and microscope, cannot discover the least organic lesion. Some terrible cases of yellow fever, known as "walking cases," have ended — or rather begun — with this sudden death. In all cases the poison seems first to strike the nervous system with its paralyzing or stunning influence.

Now the fever, and all the phenomena of the first stage, are simply the reactionary efforts of nature to throw off the morbid poison. The heart would be paralyzed at once, but the fever stimulates it to overcome the tendency to death. The fever keeps the man alive, as the whiskey keeps the snake-bitten victim alive. In mild cases it succeeds, and health is restored. In bad cases the fever subsides in two or three days, not because the disease is cured, but because nature is exhausted, and the patient sinks into a fearfully adynamic condition. The blood is disintegrated: then come hæmorrhages, jaundice, delirium, and black vomit.

This reactionary fever is severe. It is attended with frightful pains, and threatens congestion to almost all the viscera; sometimes to one, sometimes to another. It is dangerous, but it must

not be thwarted. It must be held in check, not suppressed. Bleed your patient profusely, purge him freely, sweat him copiously, sicken him with Tartar emetic, or bring down his pulse boldly with Digitalis or Veratrum viride,—and what is the consequence? You have killed him.

You must moderate the fever with caution, watch it, anticipate localizations of the morbid process, and in the severer forms, when the fever subsides, supply its place promptly but cautiously with food and stimulus. When the failure of animal heat begins to warn you that nature is flagging in her grand effort, reinforce her with food, stimulus, and new and more powerful homœopathic specifics.

This view explains why yellow fever cannot be treated like other fevers,— a fact very puzzling to the inexperienced. If you sponge your patient freely with cold water, let him lie uncovered, drench him with cold acidulated drinks, change his linen every day, and treat him as you would a case of typhus or bilious fever, he will assuredly die. Either his case was a very mild one, or he had a Samsonian constitution if he survives. Many a yellow-fever patient has lost his life by a current of cold air, by sleeping uncovered, by getting up to stool, by changing his shirt at an improper time, by moving from one bed to another, by eating the least portion of indigestible food. The thread of life, already attenuated, has been sometimes suddenly snapped, even when the patient seemed to be doing well, by the communication of unpleasant news, by the discharge of an evening gun, or by a passing wail of funeral music. This is the distinctive feature of yellow fever which makes the nursing of it as important as the medication. The patient has a subtile poison coursing through his veins, disintegrating and defibrinizing his blood, and threatening every hour to exhaust and paralyze the nerve-centres of both animal and organic life. You will moderate the fever very considerably, alleviate the pains, and thereby raise the spirits of your patient by giving him a hot mustard foot-bath, to

be repeated if necessary, and allowing an occasional saucer of hot sage, orange-leaf, or black tea. I do not believe either of these articles antidotes, in the least, or the homœopathic remedies which you will be called upon to prescribe. If the patient dislikes hot drinks, give him half a glass of ice-water every half hour. If he is already constipated, or has just eaten a hearty meal, a mild purgative will do him no harm; and, in any case, a copious warm enema is a very valuable palliative.

Aconite, Belladonna, Bryonia, and Gelseminum are febrifuges of great power. They all produce the burning fever, violent pains, and the usual symptoms of the first stage of severe febrile and inflammatory diseases. Aconite and Gelseminum produce the chilly stage, or that of nervous depression, and therefore are better adapted to pure fever than Belladonna and Bryonia, which belong more to the inflammatory type. The comparative study of these important drugs could occupy many pages. I shall here give only the characteristic symptom or key-note to each remedy, which will lead you, nine times out of ten, to its proper selection.

Aconite is indicated by high fever, with constant restlessness and tossing about, with extreme anxiety about his sickness, and with fear of death. These symptoms so frequently characterize yellow fever, that Aconite is prominently the remedy for its febrile stage.

Belladonna is indicated by the same high fever, with restlessness, not from fear or pain, but from sensorial excitement or delirium, with very red face and dislike of light.

Bryonia, when the headache and other pains are of such a character that the patient lies as still as possible, drowsy, peevish, and thirsty.

Gelseminum, when there is considerable stupor, with heavy, drooping eyelids, with indifference, prostration, and dislike of being spoken to.

There are, no doubt, more delicate shades of discrimination

between these remedies, which future observation will enable us to verify and utilize. I employed them from the first to the sixth attenuations, — alternating sometimes one with another, sometimes one of them with Lachesis.[30]

The violent pains, especially of the head and back, are sometimes not relieved by any of these remedies. If the hot foot-bath and hot cup of tea bring on perspiration, the patient will generally experience partial relief. Mustard plasters sometimes are of temporary service. I discovered one remedy which, in many cases last year, had a prompt and delightful effect in alleviating these atrocious pains. It was Colchicum of the first attenuation. I was led to try it from its known efficacy in the terrible sufferings of gout, and from the fact that the constitutional type of the epidemic was eminently rheumatic or neuralgic. Iris versicolor gave similar good results in a few cases.

The vomiting of this stage, when excessive, is quieted by Ipecac[6 or 30], or by Tartar. emet. 2nd centes. trituration. There are many other remedies and measures useful for this symptom, not now necessary to enumerate.

With — or, in mild cases, without — this course of treatment, the fever will subside in two or three days; and then comes the real danger of yellow fever (in one form), from the occurrence of exhaustion, hæmorrhage, jaundice, suppression of urine, and black vomit. Unless the cerebral congestions, which occasionally occur in the first stage of the bad and so frequently fatal cases, still continue, one would hardly think the patient in the least danger. His skin is moist, tongue clean, pulse soft and quick. He has little or no pain, and professes himself perfectly easy and satisfied. There must be no relaxing of care in the nursing, the diet, or the medical attention. The whole scene may be sadly changed in a few hours. The approaching storm will be heralded by the appearance of nervous restless-

ness, slight discoloration of the eyes or skin, and acid eructations or vomiting.

This patient must be fed with milk-punch, — a tablespoonful of best brandy to half a glass of fresh milk, — and nourished every three or four hours with enemas of one ounce of strong beef-tea. Give a tablespoonful of the punch every two or three hours. Every time he vomits, give him a teaspoonful of officinal lime-water. Put a cold compress over his abdomen, and a small one across the lower part of the neck in front. If not relieved, give one grain of Argentum nitricum, 1st centesimal trituration, after every act of vomiting. The effect of this remedy is sometimes truly wonderful. To an obstinate case, attended with increasing prostration, give a teaspoonful or tablespoonful of best iced champagne every two or three hours, or even oftener.

Crotalus must be steadily persisted in about every two hours in all malignant or severe cases of yellow fever in the second stage.

You will see other cases — cerebral cases — in which the fever, stupor, etc., of the first stage do not appear to subside, but deepen rather into a kind of typhus, with strong symptoms of meningeal inflammation. These are very frequently fatal cases, and always hard to manage. Besides the remedies above indicated for the febrile stage, great benefit may be expected from Glonoine[3] and Corallia[6]. Dr. Bailey, of New Orleans, one of our most intelligent and successful practitioners, was, I believe, the first to recommend Corallia in this congestive cerebral form of yellow fever. I can testify to its value, especially in the cases of children.

There is still another form of the second stage of yellow fever, almost as dangerous and fatal; when the remission of the febrile symptoms is imperfect, and the disease assumes a kind of gastro-hepatic, inflammatory type. It is characterized by burning pains in the stomach and bowels, vomiting, passing from

brownish and claret-colored into the genuine black vomit, increasing jaundice, delirium, and collapse. Here Arsenic[6] appears to be the main remedy; alternated with Crotalus or Lachesis, its effects are soon discovered. If it fails, Phosphorus and Veratrum may be studied as substitutes.

There are sometimes anomalous forms of this second stage, which we cannot better describe than by saying that the disease is running into a typhoid condition. These cases are unquestionably benefited by Baptisia and Rhus, which are in this disease the Aconite and Belladonna of typhoid fever.

Cases apparently hopeless have been saved by frictions with heated oil and steady stimulation with champagne. Some physicians, singularly enough, prefer ale and porter, under the idea that food is thus conveyed, as well as stimulus. The nourishment contained in a whole bottle of one of the malt liquors is not equal to that in a tablespoonful of pure cream, or an ounce of beef-tea. I prefer simple, concentrated food, and strong, rapidly-acting liquors, such as brandy, whiskey, or champagne.

Dr. Hering has stated, and different authors have echoed the statement, that Carbo vegetabilis corresponds more perfectly than any other remedy to the totality of yellow-fever symptoms, and is capable of arresting the disease in its most malignant form, and sometimes *in extremis*. The pathogenesis of Carbo veg. certainly presents many striking points of similarity to that of yellow fever; and to Crotalus and Arsenic it is probably an analogue which may yet prove serviceable. It seems, however, to me, to correspond to the collapse of cholera, rather than to that of yellow fever; and it has proved useless in the few cases in which I have tested its virtues.

You may give all these remedies at the right time and in the right doses; you may stimulate your patient, nourish him, and nurse him properly; but you cannot do your whole duty to him, and give him the best chance for his life, unless you keep a

vigilant eye on the state of his nervous system, — unless you soothe him, and quiet him, and encourage him, and give him sleep. This is true of all the stages, but especially at that point when the patient fluctuates between febrile excitement and impending exhaustion.

The yellow fever exceeds all other fevers in the anxiety, mental depression, wakefulness, and intense nervous restlessness which attend it. The sleep of the patient is too frequently the stupor of fever in the first stage, and the stupor of exhaustion in the second. The occurrence of several hours of sweet, natural sleep is of the best omen. Obstinate pervigilium, on the other hand, is a dangerous symptom, and especially if attended with constant jactitation. To your yellow-fever patient the night is more important than the day. The prescription you make at your evening visit may determine his fate.

Our practice is rich in resources for obtaining that desirable end,—a quiet state of the nervous system, so that natural sleep follows. Ignatia^{6}, Coffea^{200}, Belladonna^{200}, Hyosciamus^{6}, were favorite and powerful remedies. It is needless here to draw the nice shades by which they differ, as even homœopathic laymen are acquainted with their incomparable virtues, before which Baltley's Sedative and Bromide of Potassium "pale their ineffectual fires." It will be necessary sometimes to drop all other medication, and give a dose of one of these remedies every fifteen minutes until the patient goes to sleep. Never wake him to give medicine. Always leave a second medicine to be given, if the first fails, but do not give that direction in your patient's hearing. Agaricus$^{3 \text{ or } 6}$ will be found a very useful night-remedy when, in addition to a loquacious delirium, there is an exhibition of blind rage against the bystanders, especially after Belladonna, high and low, have failed.

I discovered in Platina^{30} one of the most reliable adjuvants in controlling the state of intense nervous wakefulness, so distressing to both patient and nurses. I was led to it by the similar

state of the mental and nervous system it induces, and by its specific action on the sexual and uterine apparatus. The menses always come on in yellow fever, with black blood, almost a hæmorrhage. If the woman is pregnant, she tends to abort. Trying Platina[30] first in women under such circumstances, I extended the use to children, and even to men, with a gratifying success. Quinine produces the same pervigilium and tendency to flooding, and ought to be sometimes homœopathically indicated in yellow fever. Small doses of it are valuable in a tardy, nervous, sleepless convalescence.

But medicine alone will not always be sufficient to allay nervousness and procure sleep. One of the very best adjuvants in these cases is to bathe the feet and legs in tepid water. Repeat this foot-bath every hour until he sleeps. Sponge his face and hands and neck with warm brandy and water or bay-rum or cologne. Adjust his cover comfortably with every change of position, beat up his pillows often; give him a tablespoonful of milk-punch after midnight, of gin-punch if his kidneys are inactive; keep the light out of his eyes; let there be no talking in his room, or in the next one; and let there be cheerful voices and calm faces and tender hands about him night after night, to assist him with gentle sympathy through the great struggle.

This is a bird's-eye view of our treatment of yellow fever in 1867. It is nothing more; for yellow fever presents such innumerable variations, that, in specializing a good number of cases, a physician might find use for half the articles in our extensive materia medica. This treatment, because homœopathic, is founded on a truly scientific basis, and it will be improved, not so much by addition as by more delicate discriminations between the various remedies.

A terrible epidemic is a severe test of the strength and truth of our system. All that incredulity, ignorance, bigotry, jealousy, and self-interest can do against us will be done. Vigilant and suspicious eyes are on us. Busy, and too frequently false, tongues

assail us. Our enemies sneer; lukewarm friends begin to tremble; we feel the crushing weight of strange responsibilities. Apostles of a new creed and of new ideas, we fight, with apparently insignificant means, against the accumulated false doctrines and prejudices of all the ages. We are cheered and supported by our frequent successes, and by the voice of approving conscience, more grateful than the "applause of listening senates." The battle ends; our friends rejoice; our enemies are quiet and silent, not with the silence of contempt, as they pretend, but because their mouths have been shut by the angel of truth. We have gained a little against the mighty current we have breasted. We leave our work for the appreciation of nobler times and greater men.

IX.

CASE OF OBSTRUCTION OF THE BOWELS.

BY GEO. E. BELCHER, M.D., NEW YORK.

On February 18, 1868, I was called to see a young man of eighteen; temperament leuco-phlegmatic, although spare; has grown rapidly. He is a student, has applied himself closely to his duties, and has paid no attention to the ordinary habits of health. He remembers that he had a fæcal movement of the bowels on the previous New-Year's day, and that he has since then had two or three discharges of mucus only. How his bowels were before New Year's day he can give no satisfactory account. For some time—perhaps for three weeks—his appetite has been poor, he has suffered from occasional sharp colic pains, his abdomen has become gradually more and more distended, and flatus did not pass the bowels. He, however, continued his studies until two weeks ago, when his abdomen had become so distended, and the accompanying pains and soreness were so severe as to prostrate him. Domestic treatment for a week proved unavailing; and then for another week he was treated by a careful old-school physician, who gave the parents no hope of his recovery.

When I first saw him he was pale, with cool skin, and the extremities cold and clammy; he was thirsty for frequent small drinks only; his tongue was red at edges, and irregularly covered with a dry fur. He was restless, often changing his position, rising from his bed and walking across the room to the

lounge; he had vomited but little, and only after taking food or medicine; he could take a teaspoonful only of gruel in an hour or two without suffering; he had at times severe abdominal pains, not much aggravated by movement, but decidedly so by any kind of pressure; sitting ameliorated his sufferings; he had at times slight inclinations to stool; his abdomen was enormously distended and tender, especially over the cæcum; the scrotum and legs, œdematous; the pulse frequent and irregular. Gave Aconite and Plumbum in solution alternately every two hours.

Feb. 19.—He expressed himself as feeling more comfortable; his pains were less severe and frequent, the pulse and skin more natural, and he had slept better.

During the 20th, 21st, and 22d, I gave him the Plumb., and, alternately with it, China, or occasionally Aconite. I also gave him once a day an injection of two or three quarts of tepid water by means of a French enema-tube.* He is generally improving; shows a disposition to eat, which I restrain but slightly; pulse more natural. The injections, however, come from him not even discolored. The obstruction remains, and causes at times great suffering. On the 20th, I also gave him a small tea-spoonful of Castor-oil twice, which he tolerated well. I continued giving this twice daily, increasing the dose to a dessert-spoonful, till he was relieved.

Feb. 22.—I introduced an O'Bierne's tube about twelve inches up the rectum, and injected through it with the enema-tube as much warm water as he would bear. The injection

---

* The French enema-tube is made of india-rubber cloth, in the shape of an inverted cone. It is a yard long, and three inches in diameter at the open or widest end. An ordinary injection-pipe is attached to the smaller end at a right angle. After the pipe is introduced, the bag is held vertically and filled with water, which is pressed up the bowels by its own weight.

came away around and through the tube, without giving any relief, or releasing any fæces or flatus.

Feb. 23. — Introduced the tube eighteen inches, and gave the injection through it, without giving relief. He looks and feels better; is feeble, especially after the injection, but is able to walk about the room. His appetite is improving, and he takes his beef-tea and gruel with a relish, and retains them.

Feb. 24. — Introduced the tube twenty-four inches — the whole length — and repeated the injection, which was expelled around and through the tube. No relief, but I perceived a slight offensiveness in the air discharged through the tube; this showed that something besides the air contained in the tube had been discharged. Otherwise doing well, and he can eat comfortably all that is offered him.

Feb. 25. — Introduced a horse-catheter thirty-two inches, — the end of which was felt in the ascending colon, — and injected warm water through it; and, when he had received between one and two quarts, he began to expel the injection, and with it a large amount of offensive flatus, and some softened fæces through the tube only. The catheter was withdrawn before all the injection was discharged. He felt better; otherwise he remained the same.

Feb. 26. — Introduced the horse-catheter thirty-six inches. After injecting one or two quarts of warm water, he again expelled flatus and fæces through the tube, which was allowed to continue till a quart or so had passed. The tube was then withdrawn. Two hours after this he passed in rapid succession two enormous stools of light-colored and offensive fæces, containing a few plum pits, which he did not remember to have swallowed.

From this time he convalesced. He gradually recovered from the nervous and physical exhaustion. The bowels remained loose for two months afterwards; but when I saw him

last, at the close of May, they were nearly or quite natural. He has resumed his studies in college.

A feature worth noticing in this case is that his general health and appetite improved before he had local relief, — a point that encouraged me as to the result. Another peculiarity is that little or no flatus passed until it came with fæcal matter. The flatus accumulating and distending the colon behind the obstruction is a normal condition, — the best that could be to effect a removal of the cause. Powerful cathartics in such a case, if not quickly efficacious, must excite inflammation and soon decide the fate of the patient. Surgical operations must of necessity be uncertain as well as dangerous, and in most cases must relieve by causing an artificial anus, and allowing the obstruction to remain.

I may remark, also, that I allowed a portion of the fluid to remain, with the expectation that it would dissolve some portions of the fæcal obstruction. I gave the castor-oil with somewhat of the same idea. At any rate, when I found he tolerated the first small dose, I ventured to repeat it in larger doses, satisfied it would digest, and feed his emaciated body, if it did not act medicinally as a laxative.

X.

TUBERCULOSIS WITH SOUND LUNGS.

BY D. COWLEY, M.D., PITTSBURG.

THREE cases have come under the notice of Drs. Hofmann, Burgher, and myself, which seem to run counter to the principles generally held by the profession concerning tubercle. They also illustrate the great difficulty which often exists in diagnosing during the life of the patient, between tubercle and cancer.

Prof. Gross, in his work on Surgery, vol. i. p. 363, asserts that tuberculous and scrofulous diseases are identical in their nature. He adds: "It is remarkable that, after the age of puberty, it [tubercular disease] exists rarely in any part of the body without involving the lungs."

Prof. Da Costa, in his private lectures, used to assert — probably on the authority of Louis, — that "tubercle does not exist in any organ without existing to some extent in the lungs." I cannot, however, find a similar statement in his work on Medical Diagnosis.

In the *British Journal of Homœopathy*, vol. xiv. p. 272, the reviewer of Dr. Holland's Notes, probably Dr. Russell, remarks concerning "numerical medicine" that "all it has done for them is to establish certain fixed relations between different morbid actions; as the deposition of tubercles in the lungs taking place in *four cases out of five* when they were found in any other organ."

The principal authority for these assertions, Rokitansky, as I

understand him, does not, however, make such sweeping statements. He says in his "Handbuch der pathologischen Anatomie," vol. 1, p. 413: "Indeed very generally the first production of tubercle takes place in any organ — *usually in the lungs*,— as an almost constant rule in a certain portion of it." He however, after giving a scale of the frequency of occurrence of tubercle in different organs, states on p. 436: "Nevertheless, many tuberculoses, which in the foregoing scale hold a very high place, have quite an unimportant nosological significance, because they seldom or never occur as primary, but always as secondary; indeed, very frequently only as the partial phenomena of general tuberculosis; as, for instance, tubercle of the liver, spleen, and kidneys, and even many tuberculoses of the lymphatic glands." On page 425, he states that "tubercle of the liver is scarcely ever anything but secondary."

The opinion of the high authorities quoted, and of the majority of the profession at the present time, may therefore be presumed to be in favor of the existence of tubercles in the lung, when they are found in any other organ. Most physicians take it for granted that, if any organ be diseased in such a way as to lead to the suspicion of tubercle, the signs of that lesion must be found also in the lung, or it becomes very improbable that tubercle exists in the other organ in question. The cases I am about to detail illustrate how medical men are frequently led astray by following general rules.

The symptoms and the results of the autopsy of each case are given from notes made at the time.

Case First. — From my own practice: George Mueller aged 61, a tailor, native of Bavaria, Germany. Called Dec. 24, 1865. Symptoms: Tumor for more than six months in right side of abdomen. Pains constant; night-sweats; constipation; flatulency; sleeplessness; vomiting since yesterday.

Dec. 25. — The tumor feels almost as hard and firm as cartilage; is about eight inches long, five broad, and probably two

and a half thick; it seems to be a swelling of the peritoneum below the floating ribs; came on after an attack of dysentery; pains dull. Diagnosed cancer of the peritoneum.

Dec. 27.—Sleeps one or two hours at a time. Retains nothing on his stomach; to-day vomited up something like fæces. Pulse weak, 112 to 120. Collection of gas in colon. Ordered beef-tea injections.

Dec. 28.—Pulse almost gone; body cold; has cold, clammy sweat. Vomited a large quantity of fluid last night. The beef-tea injection brought away hard stool. Died.

Dec. 29.—Autopsy. The right lobe of the liver was enlarged, and occupied about twice as much as its normal space. The left lobe pushed over beyond the median line. A large tuberculous mass, almost globular, occupied the whole of the right lobe. It measured about four inches in lower part of the diameter. Softening had taken place in the center and formed a large cavity, from which poured forth a large quantity of pus. The stomach was attached by its pyloric end to the lower part of the diseased mass; and a large communication existed between the abscess and the stomach. There was also found in the left lobe a large tubercle of about the size of a walnut, not yet softened. No tubercle was found in the lungs, nor did any other organ present anything unusual.

Drs. Hofmann and Childs, who assisted me in the examination, fully agreed with me that it was a case of primary tubercle of the liver.

Case Second.—From the practice of Dr. Burgher. I visited the patient with him, and use the record I then kept.

May 15, 1865.—Mrs. M. C., aged fifty-eight. Complexion very pale and sallow; lips blanched; no œdema of limbs, though abdomen is somewhat enlarged. Menses ceased at 44. Although she had a great deal of trouble and hard work during the last seven or eight years, was well and entirely free from leucorrhœa or pains, till seized, a year and a half since, with

bloody discharges from the uterus. At first they were painless and fluid, but for the last five months they have been coagulated and accompanied by pains, which were pressive and followed by the expulsion of clots. Had some pain all the time; stinging pains in the hips, particularly the left hip; constant pain in the back.

Digital and specular examination showed attachment of uterus low down in the vagina. Vagina very pale; some considerable relaxation of posterior wall, so that it bulged forward and seems rather hard. A large ulcer, with well-defined, sharp edges, on left side of the os uteri, extending over left side of each lip, large enough to admit the index finger. Os not unusually hard. No irregularities in the cervix. Uterus not enlarged. The examination with the speculum was not very satisfactory, on account of the profuse bleeding caused by handling the parts. The blood coagulated rapidly.

June 1. — Distress in abdomen; tympanites. Pulse feeble, slightly intermittent.

Jan. 19, 1866. — The swelling of the abdomen had regularly increased; anasarca came on. As she was very uncomfortable in bed, it was concluded that paracentesis would bring some relief from the pressure of serum with which we concluded that the abdomen was distended. About three ounces was all that could be removed by the operation. The orifice was left open, and a small quantity dribbled away afterwards. Previous to this, she had been getting much weaker. She slept very little, and was suffering constantly.

Jan. 30. — Died.

Jan. 31. — Post-mortem examination with Drs. Burgher and McClelland. Very little serum in the abdominal cavity; but the walls were very much distended with it, particularly toward the os pubis. Several ounces were found in the pleural cavity, and more than usual in the pericardium. Lungs free from tubercle, but reduced in size, particularly the right, from pressure of

fluid in the pleural sac. The connective tissue was infiltrated with serum. Ovaries and bowels healthy, except that they, with all the other organs, were blanched. Right kidney about half the usual size; left, a quarter or a third larger than normal, and soft. The uterus was about double the natural size, and ulcerated internally. A considerable quantity of pus flowed out. The surface of the cavity was studded with rather large granulations. In the body of the uterus there was a tuberculous tumor about the size of a hazel-nut.

The uterus and tumor, at my request, were examined by a microscopist, who pronounced the tumor tuberculous.

Case Third.—This will be detailed principally in the words of Dr. Hofmann.

Mrs. M. S., aged forty-nine, mother of four children. Dark hair, spare habit, nervo-sanguine temperament. Always looked pale and sickly. Have known her twelve years. Although never seriously ill, she was troubled with a nervous headache. About four years ago she noticed an enlargement of the abdomen. I examined her, and diagnosed dropsy of the left ovary. She had not much pain, and, although excessively weak, was able to walk about. I prescribed for her, at different times, Sepia, Apis mel. and Apocyn. cann., under which her general health improved, but without diminishing the swelling. For about two years I lost sight of her, but was told that she had tried an electric physician, who said, that if she was tapped, he could cure her. She called in a physician, who tapped her and drew off about twenty-two pounds of liquid, and on the next day about eight pounds.

May 21, 1865.—About three weeks before her death, I was again called to see her. Found a hard tumor in her left side, in the hypogastric region, extending towards the median line, not very painful, but sensitive. Her skin was of a pale, yellowish tint; she was much emaciated. Her appetite was gone; tongue coated, white, not dry; no fever; she was very restless;

had to get up frequently, on account of a pain in the sciatic nerve. I found ascites.

My diagnosis was retro-peritoneal cancer. Prognosis unfavorable. The only thing which could be done was to relieve the sciatic pain, and improve the tone of her stomach. Colocynth did the first very well. For the gastric symptoms I prescribed Nux vomica and Arsenic. She commenced to eat again, and had great hope of recovering. During the last four or five days of her life she was very restless, for which I gave her one-sixth-grain doses of morphine till she slept. She was very grateful for this relief. During the last twenty-four hours she vomited a dark, blackish mass like charcoal mixed with water, which prostrated her exceedingly.

Autopsy.—Very much emaciated. Skin very sallow, as during life. Abdomen distended with gas and serum. From an opening in the region of right ovary, drew off twelve pounds of a dark, offensive serum. Section made from scrobiculus cordis to symphysis pubis, along the linea alba. Peritoneum was attached to the abdominal walls, uterus, bladder, and small intestines. Peritoneum at lower third thickened to about eight or nine lines by a deposit of thick, hard, yellowish bodies between its layers. Where they were sparse they were as small as a split pea; but, where compact and numerous, as large as a hazel-nut, and attached to each other. There were deposits in the whole of the peritoneum,—sparse in the folds of the epiploon, omentum, and diaphragmatic portion. In the left hypogastrium a portion was softened and infiltrated with blood (apoplexy). In the region of bladder and ovaries, deep-red congestion, and cavities filled with dark blood. Stomach half full of black, fluid matter, which, when poured out, looked like powdered charcoal in solution.

Section was then made along the sternum, exposing the heart and lungs. Lungs black, dotted, rather soft, emphysematous externally, with infiltrations of minute bodies, about the size of a

pin-head; very few in number. Some infiltration at root of left lung. It may be stated here, that these changes were so slight that it would have been impossible to have detected them during life. Right kidney normal; left, soft; upper portion had two cysts, each about size of a hazel-nut, probably enlarged calices. Heart normal in every respect. Fat scanty in all portions of the body, very yellow.

Portions of the diseased tissues in this case were examined under the microscope, and presented all the characteristics of tubercle. The small bodies in the lungs, which might be considered by some tuberculous, were not so, unless they were retrograding, but they showed no sign of shrivelling.

These cases are presented to give emphasis to the clearly-declared opinion of our best pathologists, that, though tuberculosis commonly invades the lungs first, it is not invariably the case; and to warn the practitioner against undue haste in denying the existence of tubercles elsewhere, because the lungs seem to be free from them.

XI.

THERMOMETRICAL PHENOMENA IN DISEASE.

BY JOHN J. MITCHELL, M.D., NEW YORK.

AMONG the many mechanical contrivances having for their object accuracy in diagnosis and certainty in prognosticating the result of diseases, perhaps none promises to be of more general application, or of greater usefulness, than the thermometer. Although it has been employed for years by the physiologist, and its indications noted in many conditions of the body, yet nothing like systematic observations on this subject have been, till recently, undertaken.

For our present knowledge of the thermometrical indications in disease, we are principally indebted to Wunderlich, of Germany; Ringer and Aitken, of England; Compton, of Dublin; and Flint and Da Costa, of our own country. In presenting to the Institute an abstract of the experience of the profession upon this subject, I shall be obliged to avail myself of the investigations of these careful observers, — being able to add the personal observations of a few months only.

It has long been well known that the temperature of the body varies quite sensibly in disease. But it is only recently that the fact has been revealed that the amount of this variation is a more constant and reliable indication as to the character of the disease, and the progress it is making, than the pulse of the patient; and, with the general symptoms, giving us data upon which to found a prognosis, far more accurate than it would be

possible for us to form without it. It frequently enables us to decide upon the existence or non-existence of a particular disease, hours before the rational symptoms and the physical signs would enable us to do so.

A thermometer for clinical observation should have its stem bent to an obtuse angle, so that the bulb may be conveniently placed within the axilla (the situation best adapted to the purpose), with the face of the ivory index directed forward. A self-registering instrument is convenient for the physician, but not when it is to be intrusted to the care of the nurse for observations during his absence. The range of the thermometer should be taken twice daily, between the hours of seven and nine, A.M., and about seven, P.M. It will be necessary for it to remain *in situ* for about five minutes, or until the mercury ceases to ascend.

Beginning our investigations with the study of the normal temperature of the body, we find that it varies according to the age. It is but very slightly affected by the thermal condition of the atmosphere. It is lowered by sleep, a full meal, or the use of alcohol; but it is slightly elevated by the completion of the digestive process. At birth it will usually be about 100° F. It falls rapidly to 95.5°, but, during the course of the first twenty-four hours rises to about 99.5° Between the ages of four and six, it ranges about 99°, and, from six to fourteen, about 99.2°. In the adult it varies from 97.6° to 98.4°. In general terms, for the purpose of our investigations, it will be safe to put the normal temperature of the child before ten years of age at 99°, and the temperature of the adult at 98°.

The variation of a single degree, either above or below this normal standard, is, in the vast majority of cases, indicative of disease, and this more or less acute, according to the amount of the variation and the characteristics of the attack.

It has been asserted that an increase of ten, in the number of the cardiac pulsations, will correspond to an increase of one

degree in the temperature. But this rule is subject to so many variations as to be of no avail in practice. Among the cases of unusual variation and discrepancy between the pulse and the thermometer, the following have been gleaned from the records of European observers: —

Disease.	Pulse.	Thermometer.
Typhoid Fever	100	105.6°
" "	120	100.4°
Jaundice	58	103.°
Rheumatism (traumatic) . . .	80	103.5°
Peritonitis	80	102.2°
Tetanus	72	104.°
After operations	120	98.5°

If any should have failed to consider the subject of thermometry in diagnosis, it may not at once seem clear to them that the noting of so slight a variation can be of any practical application. But careful consideration will convince them, we think, that, in very many cases requiring acute discrimination, we may, by the aid of the thermometer, so exclude the similar diseases as to render our diagnosis almost certain.

We would here hastily refer to a few of those diseases which, by the unwary practitioner, might be mistaken the one for the other; and we think a mere reference to them will show that, if we were able to exclude inflammatory action, either general or local, a diagnosis would be comparatively easy. This the thermometer generally enables us to do.

Pleurodynia may at times be mistaken for pleurisy. But, if

the temperature of the body be not above 98.5°, the maximum of health, we may be certain the disease we have encountered is not pleurisy.

Peritonitis, and a hyperæsthesia of the abdominal walls, are in a like manner distinguished by an abnormal or a normal temperature, respectively.

Pneumonia may be simulated by hysteria, and in the early stage of the disease, when the physical signs would naturally be absent or not marked, the diagnosis may be far from easy; but the thermometer is the unerring guide in such a case, which even the will of woman cannot falsify.

Prof. Austin Flint, in the New York *Medical Journal* for November, 1866, narrates the following case:—

"A young German emigrant was admitted into hospital with vomiting and diarrhœa, and no previous history was obtained. The dejections were not choleraic, and both diarrhœa and vomiting were promptly arrested. The urine was scanty, and not albuminous; the pulse was frequent and feeble; the surface presented marked capillary congestion, and he was greatly prostrated. On the third day he was somnolent, and he gradually became comatose without the occurrence of convulsions.

"After the coma was developed, he came under my observation; and the diagnostic problem was, whether the coma depended on uræmia, on cerebral meningitis, or on typhus fever. Narcotism was excluded, inasmuch as the respirations were not diminished in frequency, and the pupils were not contracted. The symptoms pointed strongly to uræmia; but it was desirable to exclude effectually typhus fever and meningitis. This was done by the thermometer, which showed the heat of the body to be 97.5°.

"The patient succumbed, and autopsical appearance, in connection with the history during life, led to the conclusion that the patient, when admitted into the hospital, was in the stage of reaction after an attack of epidemic cholera."

Dr. Compton, in Part 54 of Braithwaite's Retrospect, reports the following: —

"W. H., aged 29, a well-nourished man, of rather sallow complexion, and somewhat excited manner, having an occasional spasmodic way of speaking, complained, on admission, of sore throat; and, on examination, both tonsils and the back of the pharynx were seen to be considerably inflamed. He gave an imperfect history of having been ill about a week. This at first sight seemed to be merely a somewhat severe case of tonsilitis, and no further examination seemed necessary; and the case was left to be made out by the clinical clerk before the visit next day. Finding, however, the man's temperature to be 105.4°, I was interested in the case, and I made out, on examination, the existence of partial trismus, and that the tongue, when protruded, deviated slightly towards the right side. The prognosis was deemed unfavorable. The man died within twelve hours of admission, the case being one of septicæmia."

Having thus given an imperfect idea of the importance of thermometric observations in diagnosis, we will proceed to speak of the special diseases in which its use is most frequently demanded.

In the treatment of typhoid fever and typhus, the thermometer will be found especially useful to the general practitioner. By its aid diagnosis may be assured before the eruption makes its appearance, and by its careful observation prognosis is assisted, and rendered much more certain. Wunderlich notes the following as the normal course of Typhoid Fever: —

	Morning.	Evening.
1st day	98.50	100.5°
2d "	99.50	101.5°
3d "	100.50	102.5°
4th "	101.50	104 °
Second half of the week	102.00	104.°

The points most worthy of notice in the above record are, —

1. The gradual increase of temperature during the first week, until the maximum is reached on the evening and morning of the sixth day.

2. That this maximum is rarely greater than 104°.

3. The noticeable difference of nearly 2° between the morning and evening range.

In strong contrast with this disease, typhus, after reaching a high degree, generally 104°, has a *sudden* rise of temperature, frequently to 107°. In typhus we also find the pulse and temperature rising simultaneously, and so rapidly that, even on the second day, the thermometer frequently stands as high as 103°; while the average of the seventh day is, pulse 110–140, temperature 104°.

A case in my own practice, of typhoid fever strongly simulating typhus, may assist in presenting the characteristics of the two diseases more clearly. It is that of Miss F. McG., aged 15. The record was as follows: —

Day.	Morning.		Evening.	
	Pulse.	Temperature.	Pulse.	Temperature.
1st . . .	120		120	100.5°
2d . . .	120	100.5°	124	101.5°
3d . . .	120	101.°	126	102.5°
4th . . .	130	103.°	128	105.°
5th . . .	128	103.75°	128	104.°
6th . . .	126	103.°	126	104.°
7th . . .	124	102.°	124	104.°
8th . . .	104	101.°	112	103.°
9th . . .	100	100.°	120	102.5°
10th . . .	112	101.5°	120	102.5°
11th . . .	112	101.°	120	102.°
12th . . .	100	99.°	120	101. °

In typhus the heat of the body, moreover, is continuous throughout the day, there being rarely a degree of difference between that in the morning and evening, even to the middle of the second week. The defervescence is not gradual as in typhoid, but frequently the temperature will return to the normal standard in the course of thirty-six hours.

Briefly, then, it may be stated, that, with typhoid symptoms, but a temperature of less than 103.5° on the evening of the fourth or fifth day, the disease is not typhoid fever. If, between the eighth and tenth day, the evening temperature is less than 103°, the disease is not typhoid. If, on the first or second day, the thermometer exhibits a temperature of 104° or above, the disease is not typhoid fever. Thus we have striking symptoms

proving the existence or non-existence of typhoid fever some time in advance of the appearance of the characteristic rash between the sixth and twelfth days.

In typhoid fever the fluctuations between the morning and evening temperatures becomes greater near the end of the second week. At this time, if the morning temperature is below 102°, even if the evening range is high, the prognosis is favorable.

A gradual decrease of the morning temperature is especially favorable. A continuous range as high as 104° represents a disease unfavorable in its prognosis. A daily rise to 105° denotes a disease of marked severity. A daily rise to 106° denotes great danger; while a morning temperature of 104°, and an evening rise of 105° or 106°, should lead us to give a very doubtful prognosis.

Mild attacks should generally end from the fifteenth to the twenty-first day. Severe ones may last from twenty-eight days indefinitely. A sudden decrease in the temperature generally precedes intestinal hæmorrhage and diarrhœa; while a sudden rise from the current rate of the disease portends the establishment of some intercurrent complication. A temperature of from 106° – 108° in the morning is given by Wunderlich as the precursor of certain death.

Passing to those diseases of childhood which we more commonly meet, we shall find in scarlet fever facts worthy of consideration. The temperature in this disease is very much elevated, and this elevation is long continued.

A case of not unusual severity may present a range of from 104° to 106° on the second or third day. The fifth day generally determines the acme of the febrile symptoms, thereafter the temperature being subject to but slight variation. One of the best developed cases of this disease, which I have seen this year (1867), was in a boy of twelve years. The record was as follows: —

Day.	Morning.		Evening.	
	Pulse.	Temperature.	Pulse.	Temperature.
1st. . . .	120		130	103°
2d	120	102.°	125	103.5°
3d	125	101.°	130	102°
4th. . . .	120	101.°	120	102°
5th. . . .	120	100.°	120	101°
6th. . . .	115	100.5°	118	102°
7th. . . .	120	100.°	118	101.5°
8th. . . .	112	99.5°	115	100.5°
9th. . . .	88	99.°	86	

In comparison with scarlet fever, tonsilitis may well be studied. In tonsilitis the pulse may be about 100, and the average rise of the temperature will be to about 100.5°. The normal heat will be regained about the sixth or seventh day of the disease.

During the initial fever of measles, the temperature may rise to 103° or 105°, and may remain so for twenty-four hours after the eruption has appeared. But it falls rapidly, so that, on the seventh day, the disease presents an almost normal temper ·ture. If, after this fall, it should again rise, or if, after the appearance of the rash, it should continue as high as 104° or 106°, complications of some kind are probably in progress.

Between measles and typhus a marked distinction is observed upon the sixth day. In the former disease, the pulse and temperature are falling; in the latter, both are rising.

In small-pox, we meet with the high and peculiar fever, with

intense pains in the back, and a temperature of 106°. This continues until the close of the third day, when the eruption appears. Defervescence takes place speedily, and by the close of the fifth day the temperature is generally about 100°.

When the secondary fever ensues, there is a rise to 103° or 106°, which is followed by the gradual and often protracted convalescence. In varioloid the temperature on the fifth day is nearly normal, and there is no rise thereafter, unless caused by complications.

While speaking of typhoid fever, I might very properly have given the thermometrical indications of that disease which so much resembles it—tuberculosis pulmonalis. The observations upon this subject are yet so imperfect that I can but briefly and unsatisfactorily refer to it. We find the heat of the body continuously elevated, and generally it may be observed some weeks prior to our being able to discover tuberculous deposits. The usual evening temperature is from 102° to 103°, rising at times to 106°.

As regards prognosis in phthisis pulmonalis, we find that a continuous high temperature indicates acute disease. A low morning range, and considerable evening rise, indicate much less activity. If the animal heat becomes normal, the deposition has probably ceased. In a case now under treatment, the thermometer rose from 98° to 101.5° in two weeks, during the first development of the disease.

In acute articular rheumatism, we find a very high temperature, frequently ranging from 104° to 110°.

In tubercular meningitis, the temperature is largely increased; while, in that condition of the stomach and nervous system which so much resembles it, constituting the hydrocephaloid disease of Marshall Hall, we have a normal heat of the body.

In traumatic erysipelas, the thermometer frequently rises very high; in slight cases often marking 104° during the first twenty-four hours, and, in the latter part of the disease, rising to 107°

or 108°. In a case of facial erysipelas lately under my charge, involving the whole face except the upper margin of the forehead, I was enabled to announce the beginning of convalescence on the third day, with a pulse of 113; the temperature having suddenly fallen from about 102° to 98°. The following day proved the prognosis correct.

Dr. Gibson, of the Somerset Hospital, relates a series of cases illustrating the practical application of the thermometer in cases of pneumonia, and those diseases which similate it: —

"A man 45 years of age, with signs of pneumonic consolidation extending as far upward as the sixth rib, had a respiratory rate of 32 per minute, yet his temperature was normal. A woman, aged 29, having similar signs, with a pulse of 100 and respiration 32, had a perfectly normal temperature. A boy, aged 14, in whom the physical signs consisted of slight dullness, with feeble bronchial respiration at the base of the lung, was found to have a temperature of 107°." The doctor very pertinently adds, "How, in the first-named cases, could the absence of pyrexia have been diagnosed; how, in the last case, could the impending severity of the attack (for severe it became) have been prognosticated, — without the aid of the thermometer?"

The usual course of temperature in pneumonia is high on the second day, — reaching its maximum on the third or fourth, and beginning to decline on the seventh or eighth day. If the temperature is higher than 104°, a very severe attack is indicated.

In cerebro-spinal meningitis, there is often a temperature of 106° to 108°, without a proportionate increase in the frequency of the cardiac pulsations; thus furnishing a very important diagnostic from those forms of hysteria with spinal irritation (so called), which are often perplexing to the practitioner.

In yellow fever the thermometer in the axilla often indicates 108°; while, in the collapse of epidemic cholera, it falls to 90°, or even 80°, — after death, however, frequently rising to 104 degrees.

In cases of sunstroke, it has been observed to rise as high as 112°.

In Bright's disease of the kidneys, the temperature, during the acute stage, ranges from 103° to 105°, and continues so for from three to six days. When the inflammation ceases, the temperature becomes normal, though hæmaturia may be observed afterwards.

In cancerous affections, the thermometer is slightly raised, marking 99° to 100°. The third day before death of a woman with encephaloma uteri, the temperature was 98.8°, with a pulse of 130°.

A few general remarks in regard to prognosis must bring this paper to a close.

Generally, we may observe, a temperature of 101° to 103° is favorable. A rise to 105° or 106° is unfavorable. A temperature of 108° to 109° is usually a token of approaching dissolution. Wunderlich has observed a higher temperature than this, prior to death in a case of traumatic tetanus, where the thermometer rose to 112.5°, and, after death, reached 113.8°. An equable temperature morning and evening is unfavorable. A greater temperature in the morning than in the evening is very unfavorable.

In the course of any disease, an abnormal or irregular temperature is more to be feared than an unusually high one. The temperature and pulse, taken together, are of greater weight in the prognosis of the disease than the other symptoms alone. The temperature falling notably, without a corresponding improvement of the other symptoms, is generally of grave import. In most diseases, if the morning temperature continues, our prognosis may be favorable; while, if the evening temperature is continued, the reverse is the case.

In conclusion, allow me to suggest that while, by our personal observations, we should endeavor to assist our allopathic colaborers in the great work of investigating the thermometrical

phenomena of diseases, yet, as homœopathists, we seem to have a peculiar field of labor in observing carefully the thermal conditions of the body in those cases of involuntary provings of drugs that may come before us for observation and assistance: while those employed in proving drugs, deeming massive doses only of use for such purposes, may find a new field of observation opened to them; and even perhaps, in the history of our old and well-tried drugs, they may add to the number of our characteristic symptoms, and render more complete the picture of our drug-diseases.

SECTION IV.

REPORT

OF THE

BUREAU OF OBSTETRICS:

HENRY N. GUERNSEY, M.D. - - - - - - - - - - Philadelphia.
JOHN C. SANDERS, M.D. - - - - - - - - - - - Cleveland.
J. H. WOODBURY, M.D. - - - - - - - - - - - Boston.
REUBEN LUDLAM, M.D. - - - - - - - - - - - Chicago.
TULLIO S. VERDI, M.D. - - - - - - - - - - - Washington.

TO THE

TWENTY-FIRST SESSION

OF THE

American Institute of Homœopathy.

VOLUME I. NUMBER 2.

CONTENTS.

IV.	Report on Obstetrics - - - - - - -	H. N. Guernsey, M.D.
V.	Obstetric Notes - - - - - - -	J. H. Woodbury, M.D.
VI.	Spasm and Rigidity of the Os Uteri - - -	R. Ludlam, M.D.
VII.	Rupture of the Thoracic Aorta in an Infant -	H. H. Hofmann, M.D.

IV.

REPORT ON OBSTETRICS.

BY HENRY N. GUERNSEY, M.D., PHILADELPHIA.

THE Chairman of the Bureau of Obstetrics, being very desirous of presenting to the Institute an elaborate report, and one that should express the views of every member of the Bureau, addressed to each of his associates, at an early day, a request for materials to be used in its construction. With the exception of an able paper from Prof. Ludlam, of Chicago, no replies have been received; *consequently, as at the last session, he is compelled to present an individual report, for the opinions of which, it is to be understood, he alone is responsible.

The treatment of the various forms of uterine disorders and derangements, referred to in my Report submitted last year, is found to be gaining in favor, and to be, in every respect, sufficient for those who are willing, in each case, to seek the truly homœopathic—and therefore curative—agent. That local appliances are falling into desuetude and being violently denounced, even in the allopathic school, is a fact that is undeniable : we need not quote the caustic satire of Dr. Buck's address upon the guilty practice of " turning the vagina into a Chinese toy-shop," to confirm i .

The method of procedure recommended to be adopted in that hitherto frightful complication of parturition, placenta prævia,

---

* Papers were subsequently presented to the Institute by Dr. J. H. Woodbury of Boston, and Dr. H. H. Hofman of Pittsburg.

has been more fully tested than it had been at the period of the last report, by other members of the profession, as well as by the writer. The latter takes this occasion to reiterate his belief that the use of the catheter, as recommended by Dr. Wielobycki, is really the *ne plus ultra* of treatment.

With regard of the non-application of the bandage or binder to women after delivery, he is content to express his conviction that it is a step forward and in the right direction. Many physicians have discarded the bandage entirely, and give testimony to the superiority of that course over the old method of confining and compressing the abdominal contents within a pseudo-band, which, even if it were a real one, would be entirely unnecessary. While it is true that, at the recent meeting of the Pennsylvania State Homœopathic Medical Society, where this subject was discussed, the weight of testimony was in favor of the use of the bandage, it is to be borne in mind that those who speak for the bandage have not tried to do without it, and condemn, *a priori*, a course with which they have no practical experience, and are therefore not competent to fully appreciate; while, on the other hand, those who speak for the disuse of the very properly-termed binder, do so from the fullness of their experience, both in its use and without it. The following case illustrates the subject; it is simply one of many that might be adduced in support of the uselessness of any bandage or abdominal supporter after childbirth: —

Mrs. — came under my care nine months ago for her seventh confinement. Previously she had not been permitted to leave her bed without first having Mrs. Betts's uterine supporter adjusted to her person, in consequence of prolapsus uteri. She had always been bandaged in the usual way after parturition. I allowed no bandage to be used, and, in two weeks after labor, she left her bed without the supporter, and has never suffered less, or been more free from uterine difficulty of any sort.

Year by year we add to our store of knowledge. New facts

present themselves and are forced upon us, unwilling though we may be to recognize them as such. In our own school we cannot but observe that new developments are constantly assisting to elevate the practice of homœopathy to the level of an exact science; they place the law of the similars in its proper position as the ruling power in the treatment of disease, while all other means are rendered adjuvant and subservient.

This is illustrated in the following case :—

Nearly a year ago I was called upon to treat a case of imperforate hymen. The patient, a young lady, then in her eighteenth year, had been regularly made conscious of the menstrual *nisus* for a period of four years, but without any menstrual flux whatever. Upon careful examination, the hymen was found to perfectly close the vagina. Expecting to find an accumulation of menstrual fluid, I was much surprised to find nothing indicative of that condition. The possibility of there being no uterus occurred to me, and yet the regular effort to menstruate, appreciable to the patient, demonstrated the existence of ovaries, and consequently of a uterus. The case was very peculiar, and gave rise to deep reflection. My patient was in poor health, gradually deteriorating day by day.

Upon making a careful examination of her symptoms, Silicia was revealed to me. These symptoms were, prominently, obstinate constipation, the fæces receding upon their approach to the outlet; tenderness in the region of the spine, so that riding or walking was performed with intolerable pain; great debility; loss of appetite, etc. The constipation and the spinal tenderness marked the remedy far more distinctly than did the objective symptom, the occluded vagina. Silicia^{6000}, a single dose, was administered, and, at the second menstrual period thereafter, the menses flowed freely, and the finger was permitted to be passed to the *os tincæ*. It is well to add that the peculiar constipation disappeared soon after taking the remedy; while the spinal difficulty and all her other symptoms gradually

faded, and were entirely removed at the time at which the menstrual flow resulted from complete development, which, it is just to suppose, was effected through the action of Silicia.

This is a case in which a wonderful change in the organism was brought about by a process which I find myself unable to positively explain. The developing force appeared to be arrested, so that, at a given point, at which certain functional and certain organic conditions should have been completed, progress ceased. The dose of potentized Silicia set loose the arrested force; by its operation the organism was perfected; the female function was properly performed; and what would have acted as a mechanical obstruction or barrier to its completion was by this force removed.

Such is the theory with which I have attempted to satisfy my own mind. I do not mean to put it forward as correct, or even to have it subjected to criticism, but merely offer it as a possible solution as to the method of cure.

If, upon examination in the above case, menstrual fluid had been discovered to be dammed up behind the hymen, it would have been eminently proper, and perhaps necessary, to divide that membrane with the bistoury. Cases of imperfect development of the vulva in small children have come under my observation. The mother calls attention to the fact that there is not a "proper appearance," and asks for operative interference, that the child may not remain thus defective. Calc. carb., Silicia, Sulphur, or some other properly-chosen remedy, probably by stimulating the inherent but inert forces of nature, brings about, in a year or two, a perfect development. Daily experience with purely homœopathic medical treatment warrants the conclusion, and even forces a conviction, that surgical interference should be held in abeyance, and regarded as the servant of homœopathy.

It is my desire to call the attention of the members of the Institute to the treatment of infantile colic. Here we find, at the very threshold of life, the germ of a malady which is too often

speedily fatal, though it may become a life-lasting disease. But, under the benign influence of the homœopathically-chosen remedy, it is readily removable.

This disease presents itself to us in great variety, each differing phase the exponent of its individual character, and indicative of its individual remedy. It should never be suppressed by opiates or other palliatives, while a remedy which will radically cure can be chosen from the rich storehouse of our carefully-garnered and extensive materia medica. Thus will longevity be promoted, the standard of human health raised, and the *corpus sanum*, the proper receptacle for the *mens sana*, provided. I feel called upon to testify, from an experience of many years, that the homœopathic treatment of infantile colic has raised many colicky, sickly infants to the enjoyment of a robust adult life; while I have also known the suppression of the colic to result in misery ending only with life.

Finally, I would call the attention of the gentlemen of the Institute to the fact that it has been asserted that the use of Pulsatilla and analogous remedies has effected, in malpresentations, a natural presentation and consequent natural delivery. I would respectfully recommend to the members the importance of carefully noting this point, that, by accurate observation, we may be enabled to determine whether any reliance, or how much, may be placed on this mode of treatment.

V.

OBSTETRIC NOTES.

BY J. H. WOODBURY, M.D., BOSTON.

ON THE USE OF THE FORCEPS IN CERTAIN CASES.

It is an old and to a certain extent a true observation, that "meddlesome midwifery is bad." While the spirit of this maxim may many times have shielded the parturient woman from unnecessary and officious interference during ordinary natural labor, it has also been made an excuse for timidity, ignorance and unskillfulness, or of all these combined, on the part of the obstetrician. I propose, therefore, to devote a few moments to the discussion of what is the proper sphere of the forceps, and the conditions under which the highest good of the mother and child demand its use. But, inasmuch as the class of cases under consideration constitutes the exception and not the rule in obstetrics, I will briefly define what are not, in my opinion, proper cases for instrumental interference. These are, especially, all those cases in which, with a pelvic cavity of sufficient relative diameter to that of the child's head, and a normal presentation, the uterine contractions are of sufficient strength and frequency to accomplish the birth of the child within such a length of time as shall not jeopardize its life. Fortunately this class is a very large one, and comprises the great majority of all the cases that come under the care of the accoucheur. Some of the exceptions to the above rule we will briefly notice.

First,— tedious labors, or that class of cases where the uterine contractions are not of sufficient strength and frequency to ac-

complish the birth of the child without either endangering its life, or exhausting the strength and vitality of the mother. These cases often result in stillborn children, and permanently diseased or debilitated women. With no mechanical obstacle to a speedy birth, the labor is prolonged hour after hour; the head, in a perfectly normal position, either refuses to engage in the superior strait, or descends by slow degrees into the lower one, and then stops; the contractions are feeble, and recur at long intervals, or are sharp and painful, but unavailing; the strength and patience of the parturient woman, and sometimes the patience of the accoucheur himself, are exhausted.

Hour follows hour, and sometimes day succeeds day, before the end of the labor is reached, and then, too often, we have but a dead child, killed by the tedious process of its birth, to offer to the mother as a solace for all her pain and anguish. Now, what is the cause of these long labors and their sad result? Simply lack of strength, deficient power in the uterine contractions. Is it not, then, plainly the duty of the accoucheur to interfere, and "assist nature"? Now how can this best be done? Sometimes the uterine efforts can be stimulated by the administration of medicines. Pulsatilla, Caulophyllum or Ergot, may stimulate the latent energies of the uterine nerves, and produce the desired results; but, in many cases, they utterly fail to accomplish their purpose: and here it is that I would advise the immediate use of the forceps, without waiting so long as to endanger the life of the child, or to exhaust the strength of the mother.

I regard the use of the forceps in the worst of these cases as far preferable to that of ergot or other oxytoxics, for the following reasons: it gives the accoucheur a more certain, regular, and complete power over the course of labor, especially during the exit of the head, enabling him either to hasten or retard its progress, as the exigencies of the case may require. Neither does its use involve the risks which attach to the use of ergot, and which are admitted by its advocates; such as its depressing influence

upon the maternal circulation, and the danger to the child arising from incessant uterine action and the consequent pressure.

The second class of cases which we will notice as being proper subjects for the use of the forceps are those in which the diameter of the head exceeds that of the pelvic cavity. Here we are no longer upon debatable ground, and no one would object to instrumental assistance. But there is one point in connection with operations, in this class of cases, which I wish to urge upon the attention of accoucheurs. It is this: in cases where the diameter of the head does not greatly exceed the pelvic diameter, a prompt use of the forceps will often result in the birth of a living child, while a postponement to a later period would result fatally. For the head of the child will endure with safety for a short time a certain amount of compression, while a much less amount would prove fatal when long continued. Thus the head may be compressed sufficiently to enable it to pass from the pelvic cavity, and the child be born alive; while otherwise, the head would be forced down into the bony canal by strong uterine contractions, and these, continued hour after hour, would cause the death of the child from simple compression of the brain, and the obstruction offered to the circulation of the blood through it.

A case has come to my knowledge in the practice of a brother physician. It is that of a woman with a deformed and contracted pelvis, whom, by the timely use of the forceps, he has twice delivered of a living child. On three previous occasions she had been delivered of dead ones by another physician, whose policy it was to trust too much to nature, and who had waited until the child was dead before operating.

In my opinion, the evil results which so frequently follow protracted labor not only sanction, but demand, interference before definite symptoms of approaching danger have appeared. Without waiting for dangerous symptoms, the forceps should, as a

general rule, be applied at once whenever the second stage of labor ceases to be actively progressive; excepting, of course, when distortion of the pelvis necessitates some other procedure, or when the os uteri is only partially dilated, and at the same time undilatable. In such cases we should not wait, according to the old rule, "until the ear can be reached," or even for any considerable length of time, so long as we are satisfied that the labor, if left to itself, will be tedious and protracted.

A third class, in which the immediate use of the forceps is indicated, is in those instances of malpresentation of the head, which may be remedied by the use of this instrument. Among these, I would mention cases where the longitudinal axis of the spine of the mother and that of the head of the child correspond, and the child's head is forced firmly against the bones of the pelvis, and above its brim, thus converting what would ordinarily have been a simple case of labor into a protracted and exceedingly painful one. Sometimes this position of the head can be changed by simple manipulation: then all goes on well, and the birth is completed in due time. At others, it will withstand all our efforts, and here we should at once resort to the forceps. By a skilful application of this instrument, carrying the blades well upward and in front, and operating between the pains, the position may be readily changed to a natural one, and the case left to pursue its ordinary course.

The fourth class of cases which demands the immediate use of the forceps is where excessive flooding occurs before the birth of the child. Here I would urge a speedy evacuation of the contents of the womb, — a course as imperatively demanded by the safety of the child as of the mother; for we can never, under such circumstances, diagnose with certainty the source of the hæmorrhage. The umbilical cord may have been broken, or been torn from the placenta. Prompt action may here save the child's life; delay is sure to sacrifice it: nor is there but very little prospect of checking hæmorrhage from such a source, ex-

cept by the removal of the fœtus and placenta, and the contraction of the womb.

In making this plea for the use of the forceps, I am aware that there is, in the minds of many physicians, an aversion to its use. I can but feel that this is, to a great extent, unjustifiable. It is the province of the accoucheur to assist nature, to guide woman through this perilous crisis as quickly, as safely, and as pleasantly as possible. We have at our disposal powerful instruments, with which, in certain emergencies, we may aid the failing powers in moments precious to the life of both the mother and the child. It is our duty to learn the full scope of usefulness of this instrument, and to use it, when properly indicated, with as little hesitation as we would administer a medicine, or apply an embrocation. And if, by the use of the forceps, we can abridge the hours of anguish of the mother in tedious labor, and almost insure the safety of the child, shall we hesitate to use it on the ground that unaided nature *may* finally be able to accomplish the birth?

PUERPERAL CONVULSIONS.

I fully concur with Dr. Sanders when, in the last report of the Bureau, he says: "I have yet to see a genuine paroxysm of eclampsia unequivocally and with certainty controlled by a potentized drug." The vexed question with regard to treatment is that relating to the propriety of artificial delivery. The pathological condition of the patient, and its relation to the convulsions as the cause, must here be our best and safest guide. When there is reason to believe, from the absence of every other source of irritation, that the presence of the fœtus in the uterus is the exciting cause of the eclampsia, delivery by the speediest method, and that least likely to add to the existing irritation, is the manifest indication. But the propriety of resorting to artificial delivery, must depend entirely on the peculiarity of each case. If the convulsions depend upon causes evidently independent of uterine irritation, delivery will gener-

ally produce no effect, and the convulsions will continue unabated.

When it is decided to produce artificial delivery, I deem the forceps by far preferable to any other method, on account of the less degree of irritation likely to be produced by introducing the blades of the forceps than is incident either to the introduction of the hand and arm in turning, or the more complicated manual operations of craniotomy. I have notes of five cases of eclampsia (three in my own practice, and two in that of friends, to whom I had mentioned my success), where convulsions subsided shortly after the administration of bromide of potassium in two-grain doses in solution, repeated every quarter of an hour for the first hour, and then at longer intervals. In one case, where the convulsions had continued for twenty-four hours notwithstanding the use of anæsthetics, and for twelve hours more under homœopathic treatment, they ceased at once upon the administration of the bromide as above-mentioned. It is possible that the condition of toxæmia of the nervous centres in eclampsia, resulting from those agencies which prevent a proper depuration of the blood, renders them less sensitive than usual to medicinal action, and thus makes necessary the exhibition of more powerful doses in order to produce an effect.

PUERPERAL HÆMORRHAGE.

In this truly serious affection, I cannot consent to the summary repudiation of those old and well-tried remedies, the tampon, the colpeurynter, and the application of cold, both internally and externally, or either, as the case may require. I do most earnestly protest against the tendency in certain quarters to depreciate the usefulness of these means and appliances for the relief of flooding. They are by no means antagonistic to homœopathic treatment, but rather its adjuvants, inasmuch as they mechanically restrain the hæmorrhage, while the properly selected homœopathic remedy has time to act. Without stopping

here to discuss the *rationale* of the operation of either of these expedients, I fully believe that the practice and experience of a large majority of the practitioners of our school of medicine are in favor of retaining them among our remedial measures. I insist that any course of lectures or any treatise on obstetrics, which withholds from our students the knowledge of these remedies for one of the most desperate emergencies of a woman's life, — as well as, many times, of a young physician's reputation,— is guilty of a culpable omission. Let the student of homœopathy be carefully and faithfully taught the proper sphere and use of all our remedies, both old and new; but let him also be taught that he can do something more, in cases of excessive uterine hemorrhage, than to stand quietly by and wait for the action of a remedy, no matter how well indicated, while the life-blood of his patient is flowing, *pleno rivo,* from the open mouths of the uterine vessels. I have seen such marked and signal benefit result from the use of the tampon, in flooding from miscarriage, that I cannot consent to see it quietly consigned to oblivion without uttering my protest against it, or saying a word in its defence.

RETAINED PLACENTA.

I believe, as the result of my own observation and experience, that, if proper efforts are made for the removal of the placenta immediately after the birth of the child, the occurrence of this accident will be very rare. At that moment the os uteri is fully dilated, and, if contraction of the fundus be induced by grasping the abdomen over it, while at the same time a gentle but steady traction is made upon the cord, in the vast majority of cases delivery of the placenta will be speedily and safely accomplished, and very many of the so-called "hour-glass contractions," with all their painful and protracted concomitants, will be prevented. I think it a great mistake for the placenta to be left any considerable time after the delivery of the child, before efforts are made to remove it.

VI.

SPASM AND RIGIDITY OF THE OS UTERI.

BY R. LUDLAM, M.D., CHICAGO.

THE obstetrical history of the uterine cervix is one of the most important subjects that can engage the attention of the practitioner; for, despite the prominence given to deformity of the pelvis as an impediment to labor, it must be conceded that certain states of the os and cervix are, in the great majority of cases, the chief cause of the delay, and, if not properly managed, of the danger also. Every member of this Institute has met with cases of tardy labor in which the whole difficulty could be referred to some abnormity of the cervix uteri, while not one in twenty or thirty of us has ever encountered a well-marked example of dystocia from deformity of the pelvis. In this country, except in imagination, the latter obstacle is rare; being chiefly confined to the lying-in women of the populous and overcrowded cities of the old world, while the former is met with in our daily practice.

As the result of a somewhat extended experience and research, I am convinced that there are certain peculiarities of organization and peculiarities of physiological sympathy in the uterine cervix that are not generally understood. When we divide natural labor into several stages, each of which is characterized by peculiar pains or contractions, we recognize the antagonism and the consentaneousness of action of the different layers of muscular fibre which the knife of the anatomist reveals to us as belonging to the fundus, the body, and the neck of the womb.

These various fibres, which, like those in the muscular coat of the stomach, run in different directions, must act consecutively, or parturition will be tedious and complicated. The co-ordination of these several sets of fibres is as necessary as if they were separate and distinct muscles. Whatever interferes with the harmony of their action will embarrass labor; and whatever restores that harmony, when lost, may serve to complete this wonderful process.

That the contractions of the uterus are under the control of the nervous system, will not be denied. Emotional influences may modify or suspend them. A thousand circumstances may shorten or prolong labor. This is especially true of its first stage. The skirmishing pains which signify that the cervix is preparing for the expulsion and exit of the fœtus may be made to continue, or to yield by agencies that operate exclusively through the nervous centres. Hence the importance of our subject. It affords us the key to the relative success of different practitioners of midwifery. He who, in case these sympathies are unhinged, has the tact to discriminate, and who can recognize and relieve such a state as readily as the most of us can diagnose a kindred infirmity of the voluntary muscles, which we style chorea, will succeed as an accoucheur where others, for the lack of it, will fail.

But, however much the confidence of the patient in her physician and the surrounding circumstances may influence the course and termination of labor, our remedial resources should not be overlooked. In a case of labor it may be vastly more difficult to select the proper remedy, — one that is capable of regulating the disjointed, irregular, and consequently ineffectual contractions of the uterus, — than to prescribe ergot, or to apply the forceps for simple atony of its muscular fibre. If we knew more of the special physiology of this organ, we should be more skillful and successful in its special therapeutics. For any employment of remedies with a view to facilitate the

evacuation of the contents of the womb, whether in dysmenorrhœa, abortion, or labor at term, which does not recognize the fact that the uterine body and neck are as distinct and separate in their functional relations and susceptibilities as if they were two different organs, is necessarily faulty and empirical.

The internal os is the uterine sphincter. During gestation it stands guard for the protection of the embryo. When the fruit has fully ripened, its ovarian and reflex sympathies prompt its proper and necessary dilatation. That dilatation is active, and not passive. The os is not forced open by the expulsive pains, any more than the sphincter of the bowel is compelled to yield in health to every decided manifestation of peristaltic movement.

It is impossible accurately to specify the sphere of action of the remedies that modify the uterine muscular contractility. Every member present knows that ergot is not indicated in case of rigidity of the os uteri, any more than in rigidity of the perinæum. It has been employed exclusively to excite the contraction of the longitudinal fibres of the body of the organ. Like all the so-called ecbolics, it stimulates and increases the motor-expulsive force of the womb. The same is true of Pulsatilla, which is properly indicated in labor only when the os is dilated or dilatable, and all that is needed is to arouse and increase the expulsive effort. This indication may sometimes be fulfilled by it in the thirtieth attenuation. And so likewise of Nux vomica and Ignatia, which are almost specific in certain examples of muscular atony in tardy labor.

On the other hand, Belladonna indirectly increases the expulsive force by diminishing the resistance of the os, and thus removing an obstacle to the efficiency of the uterine contractions. It often happens during labor, and especially if prolonged and the waters have been discharged early, that the os becomes extremely sensitive and tender. Under these circumstances the pains may recur with great regularity, but are rendered ineffec-

tual by the pressure of the presenting part of the fœtal ellipse against this sensitive os, which causes the patient to resist them and suppress all voluntary effort. In other cases this hyperæsthesia is marked by general spasms or convulsions, which return with every pain, and really supersede the expulsive contractions by a series of irregular and explosive muscular phenomena. In such examples, Belladonna is invaluable. Given as a prophylactic in the early stage of labor, it has sometimes prevented the most serious consequences and suffering, and also indirectly hastened the delivery.

It is quite probable that the *modus operandi* of Gelseminum is similar to that of Belladonna. Its power to harmonize disordered muscular action is illustrated in its excellent effects in chorea, and in certain forms of paralysis. It may add something also to the force of the uterine contractions; but I apprehend that its chief utility, in parturient cases, consists in its influence upon the os and the inferior segment of the womb, and its power to regulate their physiological sympathies. To employ it, however, merely to dilate the cervix, as one would the *douche* or Barnes' dilators, is empirical and unsatisfactory in the highest degree.

The reputation that Caulophyllin deservedly enjoys, in facilitating labor in many cases, is undoubtedly due to its similar properties. By dilating the os it hastens delivery. The pains become of themselves much more efficient when the cervix is relaxed and the chief obstacle to delivery is removed. The patient takes fresh courage, and the work is more speedily and safely performed. The remedy does not act as a local dilator merely, but serves to restore the proper balance to the nervous sympathies of the parts involved. It is consequently one of the best remedies for the relief of the spurious pains that threaten to bring on premature labor, as well as for the wrangling, tormenting, and worthless pains that sometimes exhaust the patient

without accomplishing anything, after labor has really commenced.

It is quite probable that other remedies will prove useful in kindred disorders of the uterine muscular contraction. When we know more of their pathogenetic range and physiological relationship to the uterus, Senecin, Macrotin, and other candidates for our clinical confidence, may be serviceable. There is no more promising field of professional inquiry than this. No other viscus is so closely allied in organic sympathy with the ovaries as the uterine cervix. Nearly all the diseases that are peculiar to women disturb and impair this relationship. The hysterical peculiarities that characterize a majority of these ills, and that make a Gordian knot of their subjective symptomatology, originate here. The special pathology of uterine ulceration, uterine leucorrhœa, dysmenorrhœa, of most cases of abortion, uterine colic, labor pains, and of many other affections, is clearly traceable to derangements of functional sympathy between the cervix uteri and the ovaries. No description of these diseases is complete, and no plan of treatment proposed for their relief is what it should be, if it fails to recognize, and is not founded upon, this physiological and practical fact.

The functional sympathy between the uterine cervix and the stomach is illustrated in the "morning sickness" of pregnancy. The embryo must have attained such an age and size as to have instituted certain changes in the development of the cervix before this troublesome affection will cease. In exceptional cases, in which the body and neck of the womb attain the necessary growth without causing any considerable gastric derangement, labor at term is apt to be tedious and complicated. Hence it has passed into a maxim in obstetrics that those pregnant women who wholly escape morning sickness are liable to have tardy and difficult labors.

It is generally the case that where the os is slow to yield

during the parturient act, a sudden vomiting produces almost immediate relaxation. The vomiting is spontaneous and the relief is prompt. The same result may sometimes be observed in dysmenorrhœa. Advantage has been taken of this fact in the treatment of rigidity of the os uteri during labor. It is an old custom to prescribe emetics of various kinds to overcome this unnatural condition of the uterine sphincter. For this purpose, tartar-emetic, ipecacuanha, lobelia, and tobacco have been employed, and with varied success by different accoucheurs.

This clinical hint is significant. If we accept the theory that the dilatation of the os is active and not passive, — that, for example, it is as much under control of the nervous centres as the diastole of the heart, — we must recognize a specific relationship between these several nauseants and their effect upon the uterine cervix. This will multiply the number of our remedies for disordered conditions of the neck of the womb, and for sympathetic affections of the stomach also.

Acting upon this suggestion, I have given Tartar. emet.[3] internally for the relief of dysmenorrhœa accompanied by vomiting. I have also relieved similar attacks by its local use in the form of a suppository with cocoa-butter. Its effect is thus demonstrated to be specific, and I have no doubt but other remedies might be equally useful under similar and appropriate indications. My experiments, which have been continued during five years, do not warrant me in differentiating them.

No one has claimed that chloroform adds anything to the contractile force of the uterine muscular fibre, when it is administered in parturition. Like other anæsthetics, it blunts or suspends the sensibility of the cervix and soft parts, obliterates the spasm of the os, and removes the dread the patient has felt, and the opposition she has made, to the completion of delivery because of the suffering experienced. It equalizes the distribution of nervous influence, harmonizes the muscular contractility,

and indirectly renders the expulsive effort more thorough and effective. It not only calms and regulates the excito-motory function, but so stimulates the excito-secretory process as to facilitate delivery by lubricating the canal of the cervix and vagina with a free supply of mucus. It is the anti-spasmodic *par excellence.* The effect is similar in case it is administered with sweetened water in the form of an enema, as recommended by Dr. Holcombe in puerperal convulsions, or if given internally by the mouth. In hysterical conditions dependent upon irritability and spasm of the cervix, I have frequently ordered that ten drops of sulphuric ether should be put into half a glass of water, of which a teaspoonful should be given every five to fifteen minutes until relief follows. It is a significant fact that both anæsthesia and hysteria are sometimes followed by a temporary diabetes. Ether and chloroform should be homœopathic to some forms of hysteria.

Concerning the giving of remedies during the latter part of pregnancy in order to promote a more prompt and easy labor, a word should be said. The idea was familiar to the ancients, and doubtless had its origin in a proper motive. But professional cupidity sometimes perverts the best intentions. In this matter it has led to the indiscriminate employment of various expedients that are designed to lessen or to avert suffering in parturition.

There is little doubt that certain conditions and lesions of the os uteri, which prolong labor and produce unusual and unnecessary pain, result from irregularities in the textural changes that occur in the inferior or cervical segment of the womb during gestation. The neck and the margin of the os become hypertrophied, and sometimes almost cartilaginous. Under these circumstances the first stage of labor is prolonged, and the expulsion of the fœtus is almost or quite impossible. This unfortunate result is an affair of organization, which, although it is more frequent in first than in subsequent deliveries, may occur

in multiparæ, or successively in the same patient. With a few women this maldevelopment of the cervix appears to be hereditary. Relatively it is about as rare as presentations of the breech.

There are other cases in which the prophylactic treatment proposed may be allowable, or even advisable. Despite the tolerance of the cervix to every species of scientific crucifixion and abuse, it sometimes happens that the nutrition and integrity of its structures are so damaged thereby as to complicate and retard labor. In these exceptional cases, which but for Bennet and his followers would never be found, we may perhaps be justified in prescribing in advance for the relief of pain and the abbreviation of the entire process.

Where the nervous functions are very much perturbed, and evil consequences threaten, an appropriate treatment will suggest itself to the intelligent physician. The same is true of other contingencies of labor, as albuminuria, uræmia, and puerperal convulsions. But it is not to avert these disorders that this system of prophylaxis is recommended.

The tardy dilatation of the os, and the protracted suffering generally incident to the first labor, leads the patient, and too frequently the physician also, to infer that, unless something is done to prevent it, the second will be equally tedious and painful. She implores relief in advance. The doctor, who perhaps did not attend her in her previous confinement, prescribes one of the various expedients that have been extolled as prophylactics,—the sitz-bath, laxatives, enemata, the extract of belladonna, or Belladonna in attenuation, Pulsatilla, Caulophyllin, Macrotin, electricity, the drinking of an infusion of slippery elm, lubrications of sweet oil, Radway's Ready Relief, or, as among the Indians of Minnesota, the expressed juice of a dead snake. Her next delivery is safely and speedily accomplished, and with little relative suffering. Forthwith another indorsement is given to the particular remedy employed, and the doctor gains by com-

parison with his predecessors. This offers a premium for professional duplicity, with which we are forced to compete. What share of the rôsult is really duo to the treatment, it is difficult to determine. That in certain exceptional cases it is advantageous and humane, will not be denied. But the sources of fallacy are so numerous, and, withal, the class of practitioners most captivated by such experiments and most given to them is so incapable of discrimination, of rightly interpreting their significance, and so unreliable in every respect, that little progress has been made in this direction. All these means are empirical and traditional, as in the days of our fathers. Macrotin, for example, has been given in a domestic way for the same purpose during the last fifty years.

There are valid physiological reasons opposed to the indiscriminate dosing of our patients preparatory to labor. From first to last, gestation is a physiological function. This function may become deranged; but, until it is so deranged, it is manifestly improper to medicate the patient in hope of averting the contingencies with which it is beset. We might with the same propriety medicate the healthy lung or stomach with the intent to turn aside certain disorders of the respiratory or of the digestive functions to which they are incident.

For the proper performance of all the functions, certain hygienic conditions are requisite, as well in pregnancy as in other normal and necessary processes. But hygiene does not include the habitual taking, for weeks or months consecutively, of a stereotyped and specific prescription that is addressed to all cases indiscriminately. A sound medical philosophy would endorse the plan of reserving our remedies for those who are really ill, or at least until certain illness impends. It would be as rational in all cases to prescribe the secale cornutum as Caulophyllin or Macrotin, in advance of the actual commencement of labor, with a view to expedite the process and prevent suffering.

If either of the agencies named has the power to dilate the

os when it is constricted and rigid, its action in a normal condition of the organ, in which no such remedy is indicated, could not be elective, and might be mischievous. If Caulophyllin is capable of relaxing the cervix, it must act through the nervous filaments that are supplied to it. Given for a considerable time in advance of labor, the effect might be to unhinge its organic sympathies and defeat the end in view. Too great and easy dilatation, like too large a pelvis, may complicate instead of facilitating delivery. Whatever increases the dimensions and capacity of the inferior segment of the womb towards the end of gestation, manifestly increases the liability to presentations of the breech, the side, and the shoulder. No one would commend the habitual and daily inhalation of chloroform prior to labor in order to expedite delivery by and by. And yet it acts in a similar manner, and perhaps not more certainly, to promote the dilatation of the cervix.

If the cause of labor, as of the exit of the menstrual flow depends upon the sympathetic relation existing between the ovaries and the uterine cervix, to tinker with that relation during pregnancy is to hazard the induction of abortion, or the premature expulsion of the fœtus. It is our duty to diminish, not to multiply, the risks of this accident. We cannot reasonably expect that these means shall always be harmless. Nor can we be certain that they will be successful. As generally applied, this species of prophylaxis savors of the quackery that promises more than it performs, and grasps at the possibility of reaping a rich reward from the credulous and the ignorant, whether in the profession or out of it.

The milder cases of rigidity of the os, of which we have spoken, are easily managed. The patient's mind should be calm, and not anxious or solicitous. She should not be intimidated through the indiscretion of her attendants, nor be able to detect the least flurry in the manner of her physician. Mothers and husbands are especially prone to do or say some-

thing that will discourage her, or disconcert the doctor, or both these together. Untoward influences of this kind have the effect to derange the nervous functions belonging to the uterus, and spasm, or rigidity of the os is a natural and almost necessary consequence. Delivery is sometimes delayed for hours, or even for days, from this cause alone.

There are cases of rigidity that may be most appropriately and successfully relieved by manipulation. In these, the anterior lip of the os is slow to yield. This lip, which is sometimes considerably elongated, is thrust into the basin of the pelvis, while the presenting part is still in the axis of the superior strait. The expulsive pains have no other effect than to press down this presenting part into the unyielding portion of the os, which fits it like a cap, and which, if not thick and cartilaginous, is extremely tender to the touch. The degree and character of the suffering induced, causes the patient to relax her voluntary efforts, and little or nothing is accomplished. Descent and rotation are arrested. Labor cannot progress, and the patient may suffer for a long time, or have convulsions in consequence.

An available expedient recommended by M. Puzos nearly a century and a half ago, and practised by numerous experts since his time, may prove serviceable in cases of this kind. My friend, Dr. I. S. P. Lord, who has practised it for almost forty years, speaks favorably of it in his famous report on Natural Labor, read before the Illinois Homœopathic Medical Society in 1866. This expedient consists in sweeping the index finger around and within the anterior margin of the cervix, and pressing it up gently and firmly behind the symphysis pubis. In case the os is thick and rigid, the steady pressure of the finger paralyzes its fibres, and it will afterwards yield. Or, if it is already thin and dilatable, it may gradually be forced to recede over the presenting part, and thus escape beyond reach.

Miller, in his treatise on Obstetrics, pp. 440–41, gives the fol-

lowing explicit directions for raising and supporting the os uteri in such cases: "The index finger is to be applied just underneath the anterior lip of the os uteri, and, with its edge or palmar surface, pressure is to be made in the intervals of the pains, so as to push up the os uteri as high as possible; or the extremities of two or three of the fingers may be used in the same way. When a pain comes on, the tendency to descend is to be resisted, unless this be so strong as to require more force than it would be prudent to employ; in that case the finger must gradually relax its counter-pressure, and allow the descent to take place. But, as soon as the pain goes off, the os uteri is to be pushed up again, and its descent is again to be resisted during the next pain. In this manner, acting with gentleness and caution, but at the same time with firmness and perseverance, the os uteri must be supported until it is sufficiently dilated to allow the head to execute its rotary movement, and emerge from under the symphysis pubis." . . . "The finger is not used to stretch the os uteri, as many writers direct, but to hold it up, that it may be dilated by the head, which can then be pushed, by the uterine contractions, lower than the level at which the os uteri is held. The head dilates [distends?] the os uteri far better than the finger could, because it acts upon the whole extent of the cervix, whereas the finger could only act on the circle of the os uteri."

This manipulation, so clearly described by this author, has the merit not only of directly increasing the dimensions of the uterine outlet, but, through reflex action, of exciting the expulsive contractions of the corpus uteri. It will sometimes act as promptly and efficiently to this end as a dose of ergot would. Gardner says: "This irritation will also excite flagging uterine pains, particularly if the finger be passed as high up as possible, so as to reach beyond the cervix, where the nerves are sparsely distributed, to the base of the uterus proper."

This expedient facilitates descent and rotation by bringing

the presenting part into the axis of the basin and of the outlet of the pelvis, or, in other words, prompting it to follow the line of Carus's curve. It also supersedes the necessity for "moulding" the head, a tedious and painful process, which is chiefly due to the tardy relaxation of the uterine cervix.

Not unfrequently the rigidity of the anterior lip of the os uteri is conjoined with obliquity of the womb. Under these circumstances, the pressure of the presenting part, during the pain, is directed almost exclusively against the anterior or lateral portions of the cervix. The indication presented is to change the position of the patient from one side to the other, or from the back to the side, or *vice versa*. This may serve to facilitate the necessary manipulations, and to expedite the delivery. The same is true in case the patient has an irresistible desire, after suffering in one position for many consecutive hours, to leave the bed and stand upon her feet, or to respond to the inclination to stool. The obliquity may be remedied, and the rigidity overcome so effectually and speedily as that the labor shall even be completed before she can be gotten into her bed again.

For the relief of the more inveterate examples of spasm and rigidity of the os uteri as a contingent of parturition, where other means have failed, or serious results are imminent, a variety of measures have been recommended. Among these are the inunction of the os with the extract of belladonna, or of stramonium, mixed with lard, or with a mixture of chloroform and cocoa-butter; the continuous employment for some hours of the warm-water douche; venesection, leeches; the use of one or more of the emetics already named; infusions of tobacco or of opium as enemata; injections of warm oil and of mucilaginous fluids into the vagina; warm baths, hip-baths, fomentations; dose of castor-oil upon the accession of the first dilating pain; large doses of morphia and other narcotics, as Camphor, Lactucarium, Hyoscyamus, Belladonna, Cannabis indica; the throw-

ing of carbonic acid gas or the vapor of chloroform into the vagina; suppositories of opium in the rectum, or of tallow in the vagina; mechanical dilatation by the fingers or the sponge-tent; colpeurysis, scarification, and incision of the os and cervix; inhalation of ether or chloroform, or both; or the application of the forceps within the neck of the womb. Exclusive of blood-letting, purgatives, leeches, and opiates, one or another of these various expedients might prove useful in exceptional cases.

With the indulgence of the Institute, I will detail two cases in which I have successfully employed the forceps in extreme rigidity of the os uteri complicated with puerperal convulsions.

April 14th, 1864, eight, A.M. — Mrs. ——, primipara, was seized, while dressing for breakfast, with a severe labor pain, in consequence of which the waters escaped suddenly. She was placed upon the bed, and with the next pain, which came on within five minutes, she went into a convulsion. When I arrived she had had three convulsions, and they continued to recur with each pain. The touch revealed the os high up toward the promontory of the sacrum. It was dilated to the size of a shilling, and its anterior lip was thick, hard, and unyielding.

At eleven the symptoms had not materially changed. The convulsions occurred as often as once in five to seven minutes, and she remained comatose in the intervals. Prescribed Belladonna[3], to be repeated every fifteen minutes, and resolved to await further dilatation.

At three, P.M., my friend, Dr. A. E. Small, was called in counsel. When the patient lay upon her back, only the anterior lip of the cervix could be felt; when upon the side, we were able to diagnose a presentation of the vertex high up toward the sacro-vertebral angle. The os was now about the size of a quarter of a dollar. The convulsions and coma continued as before. We concluded it was not safe to attempt the use of the forceps. Continued the

Bell. at intervals of half an hour. Chloric ether to be inhaled at the commencement of the fit.

Met again at eight. Very slight change. The os was dilated to about the size of a silver dollar, and the soft parts were dry, hot, and tumefied. The anterior lip of the os was as prominent, rigid, and unyielding as in the morning. She was totally unconscious, and the convulsions continued equally severe and frequent. An attempt was made to introduce the forceps, the patient lying upon the back with the hips to the edge of the bed; but they could not be applied. This expedient was, therefore, abandoned until further dilatation should take place, and the doctor left me for the night at nine.

On subsequent reflection, I resolved that something must be done forthwith; for I feared that either the cervix might be torn off, as has sometimes happened, or my patient's life be sacrificed to a too protracted delay on my part. I therefore determined that, since it was not possible to apply the forceps with the patient in the ordinary position, I would try and adjust them while she was lying upon her left side, with the limbs flexed, after the manner of the old English authors. In a little while I had the satisfaction of passing both blades of the instrument quite within the cervix and locking them properly. By careful manipulation, I soon succeeded in delivering my patient, and doubtless in saving her life. The convulsions came at longer intervals for twenty-four hours, and finally ceased altogether. Her consciousness was not restored until the fourth day. She finally made a good recovery. The child was stillborn.

Three years later the same patient was delivered of a living child, at full term, with less than half a dozen pains, without convulsions or any untoward symptoms, and so speedily that all was over before I could reach her bedside.

In a similar case to that just cited, I would now prescribe the warm-water douche, to be constantly applied to the unyielding cervix by means of the Essex or a similar syringe; and, as soon

as the size of the os would permit the careful introduction of the forceps, with the patient upon the side, back, or the knees, I would not hesitate to apply them within the cervix.

Where the waters break very early in primiparæ, there is no provision on the part of nature for expanding the cervix. This mishap explains the relative duration of labor in presentations of the breech, in which the membranes are usually fractured by the first pains. I can discover no valid objection to a forcible and uniform dilatation of the unyielding os, in head presentations, by means of the forceps introduced within the cervix. There certainly is less danger of causing a rupture of the womb by their careful employment in such cases than from incisions into its substance. And where the indications to deliver are imperative, as where we have reason to believe that the convulsions will not cease until the uterus is emptied of its contents, or that the contingencies which beset the lives of parent and child are multiplied by the delay, we should proceed at once to their application.

The only case of arrest of labor by preternatural rigidity of the os in which we would not apply the forceps within it, whenever practicable, is in placenta prævia. In this unfortunate presentation, the peculiar development and vascularity of the cervix, and of the inferior segment of the womb, increase the liability to its rupture, and contra-indicate the employment of the forceps, until the os is fully dilated or dilatable.

March 24, 1868, Seven P.M.—My friend Dr. E. Kneipcke of Chicago, was called to visit Mrs.———aged 28, in labor with her first child. She had already been in labor for three days and three nights. Four physicians and as many midwives had been in attendance. The last of those who preceded Dr. K. had given the patient one and a half grains of morphine, by actual weight, in order to put a period to her pains and convulsions! The waters escaped with the first pains.

For twelve hours the convulsions had continued as frequently as once in five minutes. The os was rigid, hard, and of about the size of a half-dollar. So much of the uterus as the basin could contain was prolapsed into the pelvic cavity.

I saw this patient, at Dr. K.'s request, at half past nine. She was in a semi-conscious state between the pains and convulsions, which were synchronous; the os was of the size stated, its margin thick, well-defined all around, and cartilaginous to the touch, resting upon the perinæum. The soft parts were hot, dry, and very much swollen. In reality the os felt like an ivory ring of an inch and a half in diameter, and half an inch in thickness, placed directly around the presenting vertex. These symptoms were verified both by the doctor's private pupil and my own, as well as by ourselves.

We applied the extract of belladonna to the os most thoroughly and then determined to attempt the use of the forceps. The rigid ring about the vertex did not appear to relax or yield in the least. By my direction the patient's hips were brought to the edge of the bed, and she was placed in position, as in ordinary forceps cases. Chloroform was then administered by Dr. K. to the extent of complete anæsthesia. Having warmed a Naegel's forceps, and anointed the back or external surface of both blades with the extract of belladonna, I proceeded by careful and continued manipulation to introduce the right-hand blade. This part of the instrument brought the os uteri into the shape of a button-hole, and filled it completely. It was only by persevering effort, stretching the orifice with the blade on the one side and the finger on the other, that it was made possible to insinuate the second blade at all.

The instrument was finally adjusted in the direction of the occipito-mental diameter of the child's head, and the delivery accomplished. The utmost precaution being taken, the soft parts sustained no injury, and the woman recovered without any untoward symptoms, having survived the prolonged suffering and

the convulsions, not to speak of the morphine, six doctors, two medical students, and four midwives.

I would not be understood to recommend the employment of the forceps in all cases of extreme rigidity of the os uteri, indiscriminately. The established rule that they are contra-indicated when the os is neither dilated nor dilatable, is doubtless the more safe and proper one. But there are exceptions to this as to other general rules. Where, in consequence of the rigidity of the os uteri, either the severity of the eclamptic fit, or undue pressure of the uterus upon the body and funis of the child, are likely to produce fatal results; where the uterus has been prematurely emptied of the waters, and the woman threatens to die, from the exhaustion of a tedious labor, before her delivery is accomplished; where there is no especial reason, because of previous disorganization of the uterine cervix, or of placenta prævia, to fear an easy rupture of the womb; when other and more simple means of facilitating the dilatation or expansion of the unyielding cervix have proved ineffectual, and sufficient time has elapsed to test the powers of nature and of patience,—we certainly regard the careful use of the forceps as an available and advisable expedient.

Whether the novel method of applying the extract of belladonna in the latter case to the internal surface of the cervix will facilitate its absorption, and the consequent relaxation of the unyielding fibres, only repeated experiment can determine.

VII.

RUPTURE OF THE THORACIC AORTA IN AN INFANT.

BY H. H. HOFMANN, M.D., PITTSBURG.

MRS. L. A., aged twenty-five, primipara, felt labor pains on the morning of the 21st April, the pains becoming severer until evening, when I was called. Upon examining and finding the membranes protruding, I ruptured them. The pains continuing very severe, but labor making no progress, I gave chloroform to lessen the severe expulsive pains. Having made no further progress at midnight, I brought her fully under the influence of the anæsthetic, applied the forceps, and in a short time delivered her of a healthy female child, weighing about ten pounds. April 22.—Saw mother and child, both doing well; child had taken the breast. April 23.—Early in the morning I received a message that the child was vomiting blood. Upon my arrival, I found the child weak and pale; had had a passage from the bowels consisting of dark blood. I could not make out a clear diagnosis, but suspected the rupture of a blood-vessel. Prognosis very doubtful. Child continued vomiting blood, also passing some from the bowels, until 1, P.M., when it died.

Assisted by Drs. Cowley, McClelland, and Seip, I made an autopsy eight hours after death. Body not emaciated, skin of a waxy, pale color; rigor mortis very slight. All the organs in the chest in a healthy condition. Lungs well inflated,—proved by the hydrostatic test. Stomach and intestines filled with dark blood; the œsophagus in its middle third had a sug-

gilated appearance. Aorta showed a rupture from about the seventh to the ninth intercostal arteries. Cellular tissue, behind and to the left of the aorta, infiltrated with serous blood. The rupture could not be traced directly from the aorta into the œsophagus; the aorta otherwise apparently in a healthy condition.

I could find no cause for this rupture. Child had not been crying much. Could the chloroform have been the cause of it? And, if so, why does it not act thus more frequently? And, again, why at so late a period?

SECTION V.

REPORT

OF THE

BUREAU OF SURGERY:

W. T. HELMUTH, M.D. - - - - - - - - - - - St. Louis.
JACOB BEAKLEY, M.D. - - - - - - - - - - - New York.
G. D. BEEBE, M.D. - - - - - - - - - - - - Chicago.
E. C. FRANKLIN, M.D. - - - - - - - - - - St. Louis.
G. F. FOOTE, M.D. - - - - - - - - - - - - Philadelphia.

TO THE

TWENTY-FIRST SESSION

OF THE

American Institute of Homœopathy.

VOLUME I. NUMBER 2.

CONTENTS.

IX.	Strangulated Femoral Hernia	J. BEAKLEY, M.D.
X.	Ligature of the External Iliac Artery	J. BEAKLEY, M.D.
XI.	Surgical Operations	G. D. BEEBE, M.D.
XII.	Imperforate Anus	E. C. FRANKLIN, M D.
XIII.	Cases from Practice	J. C. MORGAN, M.D.
XIV.	Pittsburgh Hospital Cases	L. H. WILLARD, M.D.
XV.	Surgical Experiences	T. G. COMSTOCK, M.D.
XVI.	Caries of Ankle Joint	J. H. MCCLELLAND.

IX.

STRANGULATED FEMORAL HERNIA.

BY J. BEAKLEY, M.D., NEW YORK.

SOME months since I was requested, by a medical friend in the country, to visit with him a female patient who was laboring under crural hernia. The patient stated that she had never worn a truss, although the rupture had existed for more than four years; that for the last year she had not been able entirely to reduce it, but that it had never before been strangulated. The fact that the invalid never had worn a truss is worthy of attention, inasmuch as it shows that firm adhesion of the neck to the intestine may take place independent of the pressure of the pad upon this part.

On examination, I found a firm elastic tumor, about the size of a small hickory-nut, in the right groin; the tumor was not discolored, and but slightly painful, although there was considerable pain and tension of the abdomen. She was very feeble, and constantly vomited a dark-yellow, offensive fluid; her pulse was small and quick. The strangulation had existed about eighteen hours, and, as her medical attendant had in vain tried taxis and other means likely to promote the reduction of the hernia, it was thought advisable at once to proceed to an operation.

On laying open the sac, the intestine was found much congested and inflamed, but its coats were otherwise uninjured. There were about two drachms of fluid in the sac, but no omen-

tum; there were no adhesions between the body of the sac and the intestine; but, on introducing the finger toward the neck of the sac, and endeavoring to divide the stricture, I found that here the adhesions were so intimate and general between the sac and the intestine as to occasion great difficulty in introducing either the end of the finger-nail, or the point of the hernia-knife, so as to enable me to relieve the stricture. Indeed, it was only after a considerable time that I was able to effect this at the inner part of the neck of the sac, and thus relieve the stricture by dividing Gimbernat's ligament.

Had this been the first instance in which I had operated for hernia, I might have thought that the difficulty encountered was chiefly owing to my own inexperience; but, as I had already repeatedly performed this operation successfully, I flattered myself that this was not entirely the cause, but that a case might occur in which the adhesions were so general and intimate, and the stricture so great, as quite to prevent it from being relieved in the usual way.

It is obvious that in such cases, even were it practicable, division of the ring from without inwards would be unavailing as the stricture would probably exist at the neck of the sac. It becomes, indeed, a highly important question how the surgeon is to act in a case of this kind, all the distressing symptoms of strangulation continuing, and the danger of a fatal termination becoming every moment more imminent. Should the intestine, upon opening the sac, be found to be in a state of gangrene, or bordering upon such a state, the operator would not hesitate about laying open the bowel at once, and giving exit to its accumulated contents; but, finding the intestine healthy otherwise than as affected by congestion or inflammation, the young practitioner would, I think, hesitate about such a mode of procedure, notwithstanding his inability to relieve the stricture in the usual manner.

It appears, to my judgment, that the conduct of the surgeon

in the case under consideration ought to be guided by the nature of the immediate cause of the danger resulting from the stricture. From what writers, who have treated of this subject, have stated, I think there can remain little doubt that the more urgent danger arises from the complete obstruction to the passage of the intestinal contents, and their accumulation above the strictured portion of the intestine.

Mr. Travers, in his excellent work on Injuries of the Intestines, has particularly treated of this cause of danger; so also has Teal, in his work on Hernia: but I am not aware that, in most of the other excellent works we have on this subject, the emergency to which I refer has been considered.

If, now, the cause of danger and of death be the obstruction to the passage of fæcal matter, it is evident that the only chance of averting this would be to lay open at once the intestine, although unimpaired in its texture otherwise than by congestion or inflammation; and, if this did not allow sufficient escape to the accumulated contents of the bowels, to divide the intestine and stricture together, and thus allow the patient the chance of life, recovering with an artificial anus.

In performing the operation for femoral hernia in a female, Arnaud, as reported in his Mémoires de Chirurgie, found the intestines so adherent to the neck of the sac, that he could not, at any point, introduce the director between this and the gut. In vain did he introduce his crotchet under the crural arch; he found it quite impossible to relieve the stricture and replace the intestine. Finding every other means futile, Arnaud resolved upon laying open the intestine, and so dividing it, and, at the same time, the neck of the sac and the crural ring. This was done, and the patient recovered with an artificial anus.

If the adhesions be loose and spongy, they must be broken down, if possible, by the introduction of the finger-nail or the handle of the scalpel; if, however, these means fail, the gut and the neck of the sac must both be laid open.

Success has proved that in females this practice, which at first sight will appear bold, is, however, by no means rash. "In man," says Arnaud, "it is otherwise: here the crural arch cannot be divided without wounding the spermatic artery." The surgeon must be prepared for this and make up his mind to it, if, on laying open the intestine on the side, he does not obtain a sufficient escape for the fæces: for it is better, in my humble opinion, to sacrifice the testicle than allow the patient to die; and this is inevitable if the surgeon does not make up his mind to tie the spermatic artery.

To lay open the intestine, if this afford a sufficiently free egress to the accumulated fæces, and, if not, to divide both the intestine and Poupart's ligament, with the cruel certainty of dividing at the same time the spermatic cord, which must afterwards be tied, is the advice given by Arnaud, Teal, and others, who, as Arnaud confessed, had only thrown upon this subject a glimmering of that light which must lead the way to a more perfect enlightenment.

The thorough investigation of the anatomy of the parts concerned in hernia, by recent writers on this subject, has amply verified the prediction of Arnaud, and I need not add that there can now, in no case, be any excuse for wounding the cord whilst operating for crural hernia.

X.

LIGATION OF THE EXTERNAL ILIAC ARTERY.

BY J. BEAKLEY, M.D., NEW YORK.

JOHN H——, a colored man, thirty-two years of age,—tall, slim, but muscular, a fisherman near Cape Vincent, St. Lawrence Co., N. Y.,—consulted me in September, 1867, in regard to a tumor in the left groin and anterior part of the thigh, which caused great pain, extending to the knee and foot of the affected side and rendering walking painful and extremely difficult. The patient stated that the tumor had first made its appearance about a year ago. Upon examination it was evident that there was an aneurism of the external iliac artery, immediately below Poupart's ligament. It had attained an elevation of about four inches above the crural arch, and extended down along the front of the thigh. The circumference of the tumor at its base measured sixteen inches; pulsation was distinctly obvious, and expansive synchronously with the heart's action. The integuments at the apex of the tumor had become considerably thinned. Auscultation over the aneurism and external iliac revealed the bellows sound very distinct; pulse 120, small and hard. This, together with the dejected appearance of the patient, resulted wholly from the local disease, as a critical examination left no doubt of the normal condition of all the viscera.

On examining the integuments of the tumor, they were found thinned; and there was no time to be lost, if a trial was to be made to save the patient's life. It was therefore determined to operate the following day.

Sept. 2. — With the assistance of Dr. John Loucks, and two medical students, I proceeded to tie the artery in the method pointed out by Velpeau, but modified to suit the circumstances of the case. Not knowing to what extent the artery might be involved, and fearing that it might be necessary to tie the common iliac, the incision was commenced about twelve lines above Poupart's ligament, and continued to the extent of five inches upwards, terminating at about fourteen lines from the anterior superior spinous process of the ilium. This incision divided the skin, superficial fascia, and the superficial epigastric artery, to which tortion was applied. A second incision divided the external and internal oblique, and transversalis muscles, and the fascia transversalis,— the latter being divided on the director with a probe-pointed bistoury. The peritoneum and intestine then presenting, they were held out of the way by an assistant, while the attachment of the former was separated from the fascia iliaca, and turned upwards. The artery was now plainly seen, and, being free from disease, the fascia, which covered it and the vein, was divided with great caution, the vein being kept out of the way by the index finger of the left hand. The artery-needle armed with a strong ligature, was now passed under the artery. The artery was tied, both ends of the ligature being left outside. The pulsation ceased immediately; and, by the time the wound was dressed, the tumor had diminished in size more than two inches.

The patient was on the table twenty minutes, and only partially under the influence of chloroform, sufficiently to blunt the pain, leaving consciousness undisturbed. Five minutes after the patient was placed in bed, the left extremity became very hot; but an hour afterward the temperature was quite equal with that of the rest of the body. The pulse soon increased in fullness and frequency; the pain grew intense in the leg and foot for which he took Aconite and Bell. in alternation, with decided success.

Sept. 3.—Pulse 120; heat of the body uniform; mind watchful and apprehensive; abdomen tense and tympanitic. Ordered an injection of warm water, which produced an abundant evacuation, dark and fœtid. Cham. was administered during the night, to relieve general restlessness.

Sept. 4.—All the abdominal symptoms had disappeared with the exception of tenderness upon pressure. Pulse 110, and wiry. Ordered Bryonia, and rice-water for nourishment.

Sept. 5.—Pulse 100. Pain has subsided; wound slightly suppurating; tumor diminished by one-half. No pulsation to be felt in the tibial artery; heat of limb natural. Ordered beef-tea diet. P.M.—Fever; pulse 120; vomited. Ordered Acon. every second hour.

Sept. 6.—Pulse 95. Suture-pins withdrawn, except two, and the wound dressed; about an ounce of pus discharged; no medicine; beef-tea diet.

Sept. 7.—The last two pins withdrawn.

Sept. 8.—Wound healing. Continued same diet, with chocolate and bread.

Sept. 9 to 12.—Patient convalescent, wound nearly healed; diet of bread and fowl.

Sept. 16.—No appetite; vomits food; anxiety, severe pains in the limbs; great prostration; tumor and wound inflamed, with fœtid suppuration of wound; tumor about to suppurate. Warm water dressings. Carbo veg. every fourth hour, and beef-tea diet.

Sept. 17.—Pulse 135. Tumor very tense; vomiting; patient indifferent to everything. Diet and medicine the same as yesterday.

Sept. 18.—Ligature came away. Pulse small and weak; great prostration; fluctuation in the tumor; wound opening; a free incision was made into the sac, and about two pounds of coagulated blood was discharged. All the coagula were removed, with the exception of what was supposed to be a plug

over the opening into the sac from the artery. Diet,—beef tea and porter. China every second hour.

Sept. 19. — Tongue dry; face hippocratic; pulse 130. The wound of the sac being dressed, an enormous quantity of decomposed blood was discharged. Same diet and medicine continued.

Sept. 21. — Pulse 100. Tongue moist, countenance natural; patient able to assist in removing the dressings; wound of the abdomen healing; wound of the sac suppurating, and the sac itself becoming clean.

Sept. 23. — Pulse 80; strength and appetite improving; full diet. Gave Hepar sulph.

Sept. 26 to Oct. 10. — Pulse natural; sac clean and granulating.

Oct. 25. — Wound of sac healed.

Nov. 10. — Well, but was not allowed to resume his labors until the 20th, when he had the perfect use of the limb.

XI.

SURGICAL OPERATIONS.

BY G. D. BEEBE, M.D., CHICAGO.

ACUPRESSURE.

For five years past I have been making some trials of other methods of securing arteries after operations than by ligation with silk, as has been the usual practice.

In August, 1863, I amputated the thigh at the lower third, on account of white swelling, in a young man fifteen or sixteen years of age, whose system had been much reduced, and showed a well-marked scrofulous diathesis. Instead of ligating the femoral artery, I armed a common sewing-needle with iron wire and passed it under the artery near its cut extremity, at right angles to its axis. I then passed a silver wire around the extremities of the needle, crossing the trunk of the artery, and compressing it between the loop of silver wire and the needle. Then I brought the extremities of both wires out between the flaps, and closed the stump in the usual way. I gave instructions that, at the expiration of forty-eight hours the needle should be withdrawn by traction upon the wire with which it was armed, and thus leave the silver wire loop free in the stump. This was also to be withdrawn. The stump, being thus freed from all ligatures, closed by primary union, and the patient made a good recovery.

In December, 1865, I amputated the forearm at the upper fifth, in consequence of an accident in a planing-mill. In this case I armed a straight surgeon's-needle with silver wire, passed it from the integumental surface through the thickness of the

flap, and, crossing the cut extremity of the artery, passed it back through the flap, so as to emerge about an inch from the point of entrance. Between the two extremities of wire I then laid a cork flattened upon one side, and twisted the wires snugly over this, so as to compress the arterial trunk in the loop of the wire. In forty-eight hours the wire was cut upon one side of the cork and, bearing gently upon the cork, the loop of wire was withdrawn. The stump closed by primary union.

In January, 1866, I amputated the leg at the lower third, the result of an accident with a reaping-machine. The anterior and posterior tibial arteries were secured as in the case just described. The wires were removed in thirty-six hours, and the case recovered well.

February 6, 1866, I made use of the same method for securing the femoral artery after amputation of the thigh at the lower third, for white swelling. The wire loop was removed after forty-eight hours. The patient suffered from erysipelas of the stump, extending to the face and scalp. He recovered from that, and seemed to be doing very well, until March 16, thirty-eight days after the operation, when in the night he was suddenly attacked with secondary hæmorrhage from the stump, which returned in the morning, and was so profuse as to indicate clearly that it was from the femoral artery. The stump was laid open, and found to be deeply excavated by foul ulcers, one of which had destroyed the arterial trunk, and given rise to the hæmorrhage. The diseased tissues were removed, the margins of the flaps freshened, and the stump closed, the artery being secured by compression as before. In forty-eight hours the artery was liberated again; and, though the patient again suffered from erysipelas of the stump, face, and head, he survived the accumulation of disasters and made a good recovery.

Several advantages are found to attach to this mode of securing arteries: —

1. If the artery is found to be insecurely held by the wire loop

after the stump has been closed and reaction comes on, it can readily be tightened by twisting the wires more snugly over the cork, without opening the stump.

2. Secondary hæmorrhage attributable to faultiness of the method has never occurred after its use.

3. Secondary hæmorrhage, in my observation, has occurred, in a large proportion of cases with the silk ligature, either from imperfect ligation or from the ulcerative action which must of necessity occur to free the ligature, and which opens the arterial trunk again at the point of ligation. These evils are wholly obviated in the method by compression.

4. Stumps which would close by first intention are often prevented from so doing by the presence of the ligature acting as a seton in the stump, as well as by the ulcerative action going on at the point of ligation.

5. The recovery is more certain, the convalescence more rapid, and the attendance of the surgeon less protracted, under this method, since, all other things being favorable, but little attention is required after the wires are removed.

EXSECTION OF INFERIOR MAXILLARY.

In operations for the removal of the central portion of the lower jaw, it is always more convenient to divide the lip at the mesian line. But against this mesian incision the very serious objection is urged that the cicatrix drags the lip downward at the centre to such an extent as to prevent the perfect closing of the mouth; this allows the saliva constantly to escape. To obviate this difficulty, I have applied the principle which governs in operating for hare-lip; viz., to make the line of incision curve somewhat abruptly away from the mesian line upon either side at the vermilion border of the lip, and then to curve more gradually inward to meet in the mesian line an inch below. This removes a somewhat elliptical portion of integument; and, when the margins of the flaps are approximated, the border of the lip

is made to pout quite prominently upward at the mesian line. This is overcome by cicatrization, and the natural line of the lip is restored when the recovery has occurred.

HYDROCELE.

The radical cure of hydrocele by removing a portion of the tunica vaginalis testis has, with me, entirely superseded the old operation of evacuation with the trochar and canula, and the injection of irritants.

The removal of a portion of the tunic is accomplished by an incision through the front of the scrotal integument two inches in length; the integuments being dissected up from the tunic over an area proportioned to the size of the hydrocelic tumor. The tunic is then seized with a tenaculum, the fluid is evacuated by a free incision with the bistoury, and a portion of the tunic is rapidly cut away, either with the bistoury or scissors.

Care being taken that all bleeding shall have ceased, the integuments are closed by silver suture. A water-dressing is applied as soon as inflammatory action begins, and a rapid recovery follows. The tunic being unable to form a shut sac, the difficulty cannot, of course, return.

XII.

IMPERFORATE ANUS.

BY E. C. FRANKLIN, M.D., ST. LOUIS.

THIS variety of malformation, to which I desire to call the attention of the Institute, is included within the first division, sixth species of a recent classification, with hypospadia superadded; it presents one of the rarest and most interesting anomalies of retarded development recorded in the annals of surgical literature. So far as my examination has been carried, there is scarcely a published case that possesses so many peculiarities of malformation as attaches to the one under consideration.

The patient, a little boy some thirteen months old, born of healthy parents, and possessing all the other requisites of a perfect and well-developed form, save the malformation before mentioned, was placed under my care for surgical treatment. Upon a physical examination of the case, I found that not only the rectum and its terminal apparatus (the anus) were involved in the malformation, but also the urethra, scrotum, and bladder.

Malformations of this character have been attributed by authors to various causes. In some instances they have been regarded as products of imperfect conception, the fault lying either in an imperfect formation of the ovum, or in an anomalous quality of the semen, or the result of some extraordinary derangement of plastic formation at some period during the evolution of the embryo, or the fœtus in utero. Hypothetical as this may appear at the present day, it is probably in as close relation to the

truth as it is possible to state the proposition. From remotest antiquity malformations of the anus and rectum have been observed by authors: the Greek, Roman, and Arabic physicians have transmitted to us many interesting and remarkable instances of these congenital vices of structure. They, however, regarded them as beyond the reach of remedial aid, and consequently possessed of little or no importance, save as *lusus naturæ*. Under the generic term, imperforatio ani, authors have included all malformations of the rectum and anus, however distinctive they may be from one another. Thus an anomaly, in which the anus itself is pervious, though otherwise malformed, has been erroneously denominated an imperforate anus; and, in the same manner, the term has been applied to cases when the deformity existed in the rectum, more or less remote from the normal anus. These generalities have led to a confusion of terms entirely too comprehensive to include the various malformations to which these organs are subject, or to give a distinctive significance to either.

The classification which I have adopted, and which seems to possess all the shades of difference heretofore observed in these anomalies, consists of nine species; viz: —

1. Those in which the margin of the anus is preternaturally narrowed, the strait at times extending a short distance above this point.

2. Those in which there is complete occlusion of the anal aperture by a delicate membrane, by the common integument, or by an analogous substance more or less hard and thickened.

3. Those in which there is no anus whatever, the rectum terminating in a cul-de-sac near the normal outlet, without any communication externally or internally.

4. Those in which the anus is normal, but the rectum, at various distances above it, is either deficient, obliterated, or completely obstructed by a membranous septum.

5. Those in which the rectum terminates externally by an

abnormal anus, located in some unnatural situation, as at some point in the sacral region; or the rectum is prolonged in the form of a fistulous sinus, and terminates by an abnormal anus at the glans penis, the labia pudendi, or at different points in the perineum: the natural anus being generally absent, its functions are performed by the abnormal one.

6. Those in which the rectum opens preternaturally into the bladder, urethra, or vagina; or forms with the urethra and vagina, a cloaca in the perineum. In these cases the normal anus does not exist.

7. Those in which the rectum is normal, with the exception that either the ureters, the vagina, or the uterus open preternaturally upon it.

8. Those in which the rectum is entirely wanting.

9. Those in which both rectum and colon are absent, with an abnormal anus occupying some extraordinary part of the body.

Thus it will be found that the case under consideration is embraced in the sixth species of the classification.

As many of these vices of conformation are not only common, but remediable when early and prompt measures are employed for their relief, it is imperative that the surgeon should possess a thorough knowledge of all medical and surgical processes which experience has decided to be best adapted to the relief of each particular deformity. The accoucheur, too, whose vocation calls him to the bedside of the parturient woman, and who is or should be the first to discover any imperfections or deformities in the normal structure of these organs, should also possess the requisite knowledge to correct these malformations, which, if not early remedied, will surely and quickly end in the death of the patient. Nothing here will avail but prompt surgical interference, and the adoption of such measures as will tend to remedy or normalize the derangement as nearly as possible.

The important duty of examining minutely every infant at birth, and even for a day or two afterwards, to detect any ab-

normities of these outlets of the body, should not be neglected by the accoucheur. Female accoucheurs and uneducated obstetricians are too prone to pass deformities of this character unnoticed, and not a few infants have been sacrificed by the inattention and ignorance of this class of pretenders. Neglecting to observe these abnormities, and to discover the true position of matters, they betake themselves to the mortar and gallipot, and make up for their deficiency of knowledge by repeated doses of laxatives and cathartics. In all cases, say they, the retained meconium must be expelled; and they defend their practice upon the ground that its retention is productive of that disease so much dreaded in our more southern latitudes, trismus nascentium. To the enlightened and educated physician, such a popular and superstitious belief savors more of the barbarous age of medicine than of the present advanced and enlightened era of medical progress. Such practice is not only highly injurious, but actually criminal; upon the innocent sufferer it entails organic diseases, from which death is the too frequent result. If the defect be malformation or permanent obstruction of the lower bowel, such practice is little better than murder. In cases of this character, the sin of omission is scarcely less than that of commission; for, in a number of recorded cases of complete occlusion of the rectum, life has been prolonged for a number of days and even months, without any evacuation from the bowels, and before any violent symptoms had taken place.

Woolf mentions a case of imperforate anus and rectum, where the deformity was not discovered, until the close of the twelfth day, and no unfavorable symptoms had manifested themselves; the child during all this time was without any movement of the bowels; then it was attacked with vomiting, hiccough, and convulsions, attended with distention and hardness of the abdomen, great prostration, and final death.

Mr. West relates a case, communicated to him by Mr. Arnott, in which the child lived seven weeks and three days, the

rectum being entirely absent, and the colon terminating in a blind sac floating loosely in the abdominal cavity.

Dr. B. A. Shipman, of Cortlandtville, N.Y., mentions a case of a still more remarkable character, where a child had an imperforate anus, and lived three months without ever having had anything pass from the bowel. He remarks that the child, so far as could be ascertained, was affected with no more than the ordinary amount of restlessness, vomiting, or crying, and was considered healthy in all respects.

Dr. La Marre * mentions an interesting case of a child with an imperforate anus, that lived six months without ever having had an evacuation from the bowels. This case differs from the preceding in this, — that the milk was continually ejected from the stomach as fast as swallowed.

Another case is reported in the *Provincial Medical and Surgical Journal*, March, 1851, where a child having an imperforate anus lived to the age of one hundred and two days without either vomiting, or having any evacuation from the bowels.

It is, therefore, readily proved that it is far more humane to suffer such cases to die through the slow process of inanition, than hasten death by the violent cathartics and torturing appliances of a drastic therapy; and it is infinitely more in accordance with an enlightened profession to treat them by the approved surgical processes now established.

In all cases of anal obstruction or malformation of the rectum, medicines of a cathartic character should be positively proscribed; and even the natural food of the infant should be administered sparingly and with caution, until the malformation or obstruction be disposed of. If, from the nature of this vice of conformation, it is found impossible to remedy the evil, and death is inevitable, it were better that it should occur gradually by inanition than precipitately by potent medication.

---

* *Journal de Médecine de Paris*, tome xxxiii. p. 170.

The only period when purgation is admissible is during the first stage of the operation, when the surgeon avails himself of this process to determine the position of the extremity of the intestine, it being forced downwards, as it were, by the expulsive efforts of the cathartic, and in this manner more readily detected by the surgeon.

In alluding to the frequency of these vices of structure, a recent author remarks: "I am of the opinion that these malformations, in some form or other, are of much more frequent occurrence than is generally conceded; and that many children, born with some one or other of them, are suffered to perish for want of timely and proper surgical assistance, through either the neglect, ignorance, or mismanagement of midwives and monthly nurses. None, doubtless, but the most desperate and the most remarkable cases are ever reported, the rest being entirely overlooked or passed by unrecorded.

Ætiology.—In reference to the causes inducing these malformations, nothing of a definite or satisfactory character has yet been ascertained. The science of embryology, which has received so marked an impulse of late, teaches that, at any period during the evolution of the embryo or the fœtus, the action of the formative energies in any part of the organism may be so affected or so influenced as to become partially or wholly suspended or augmented, and result in either the production of imperfect or anomalous organs, or in an entire want or non-production of them. To this condition is referred the source of many of the congenital malformations described as taking place in the rectum, urethra and anus.

M. Serres attributes the incomplete development of a part to a deficiency of arterial growth which should convey the nutritious materials to the undeveloped organ.

Tiedemann, on the contrary, believed that congenital malformations or anomalies depended upon the imperfection or want

of certain portions of the nervous system. He found that, whenever the nervous system was wanting or defective, the part which such nerves supplied was correspondingly defective or wanting. He was of the opinion that the nervous system controls the formation and development of the embryo, and determines the particular form and disposition of the organs. M. Andral contends that, whenever a part of an organ is imperfectly formed, or found to be partially or wholly wanting, those parts that precede it in the normal state have themselves undergone an arrest of development to a greater or less extent.

It is difficult, under either of the foregoing hypotheses, to determine to what causes these vices of development during intra-uterine life are due. Sex has been supposed by some to exercise more or less influence in the production of defective congenital developments. Observation certainly proves that malformations most frequently occur among males, but the cause of such defect is difficult of explanation.

Prognosis. — The prognosis in those cases in which the rectum communicates with the bladder or the urethra, as is shown in the present case, are unfavorable, unless surgical process bring relief. The great danger in such cases consists in the smallness of the recto-vesical opening generally, and the length, narrowness, and flexure of the male urethra. The extremely delicate and highly sensitive mucous lining of the bladder and urethra is in danger of inflammation, and consequent derangement, by contact with the highly irritating excrementitious matter passing through this canal. And, in those cases where the recto-vesical orifice is so small that nothing but the thinnest portions of the meconium can pass, the greatest danger then is from the accumulation and retention of the excrementitious matter, as happened in the case under consideration.

M. Bertin, a few years since (and the opinion is held by some surgeons of the present day) stated that, when the rectum

opened into the bladder or the urethra of the male, the result was uniformly death. The prognosis is more favorable when the rectum terminates in the vagina, in consequence of the width and straightness of this canal, and because the amplitude of the recto-vaginal aperture is generally greater.

Treatment. — The treatment for the relief of these different forms of malformation depends entirely upon the termination of the rectum, in the bladder, or urethra, and is fraught with more or less danger.

The indication in either case is to establish an artificial anus in the perineum, if the rectum can be found, and thus open a new route for the free exit of the fæcal matter which may in a short time be diverted from the abnormal channel, and in this way produce its gradual obliteration.

Should the rectum open either into the bladder or into the urethra, and death threaten, the surgeon should at once institute a search for the end of the rectum, and, if possible, form an artificial anus in the natural situation, capable of giving free egress to the accumulated meconium, gas, and excrement, and maintain it pervious thereafter.

In the case referred to, the following three operations were determined upon: first, to make an artificial anus in the normal position; second, to unite the sides of the scrotum by plastic operation; third, to make an artificial urethra through the penis to connect with the opening below, and to close the abnormal orifice.

The *first* operation was performed by making a straight incision, of about one inch in length, along the raphe, and corresponding with the normal position of the anus. The patient having been placed under the influence of chloric ether, the position was determined by introducing a director into the abnormal opening, and directing it backwards and downwards until it occupied the normal position of the anus. Then, cutting down

upon the director, the incision was carried forward to the extent of one inch, both rectum and external tissues being divided. Immediately after the opening into the rectum, the fæcal matter passed through the incision thus made. It was kept dilated by means of a rectal bougie: the size was increased from time to time, to secure a free passage for the contents of the bowel. In two weeks the child passed all fæcal matters through the artificial anus; and up to this time not the slightest difficulty has been experienced, the sphincter relaxing and contracting, as under a natural state of things.

The *second* operation consisted in paring away the edges of the scrotum and bringing them together, and preserving them *in situ* by the interrupted suture. This process was performed the second time, before I could get union between the surfaces. The urine in the first instance flowed over the incision, producing inflammation, breaking down the tissues, and thus preventing union by first intention. The second operation was successful, and terminated in a perfect adaptation of the scrotum, and obliteration of the sulcus made by the congenital separation.

The *third* operation I have deferred until the little patient shall have attained more size, and the penis becomes correspondingly enlarged. I have no doubt but the latter procedure will eventuate in a complete transformation of the malformation into a tolerably natural condition of the urethra. The two operations thus far concluded have entirely relieved the anal and scrotal deformity, and the natural condition of the patient has been completely restored.

XIII.

CASES FROM PRACTICE.

BY J. C. MORGAN, M.D., PHILADELPHIA.

NECROSIS OF HUMERUS.

C. B., AGED twelve years, a blonde, having been already more than three months under allopathic treatment, presented himself with necrosis of the upper two-thirds of the shaft of the right humerus, and with sinuses here and there as far as the elbow, which was stiffened. There was also a sinus on the right thigh, but it could not be traced to dead bone, — only to the periosteum. The history of the case showed that he had had a dislocation of the shoulder, which had been reduced by traction. Soon after, the sinuses formed, and the limb enlarged, — a new shell being evidently in process of formation. Ruta was first given; afterwards, Calcarea.

The sequestrum remaining immovable, the upper sinus was treated three times a week by injections of acetic acid, diluted with eight times as much water, — in other words, of the strength of vinegar. This was intended to dissolve the connection between the dead and living bone. The injection caused no unpleasant effects, and seemed to effect the object intended, at the lower end, though not at the upper epiphysial connection upon which, owing to gravity, it had hardly acted. This having been sufficiently applied, the operation was performed thus: —

Anæsthesia being effected by ether, a straight incision, about five inches long, was made from one of the two main sinuses, near the shoulder, to the other at the middle of the arm. It

went down to the new shell, which was found to overlap the ends of the sequestrum, leaving the middle exposed. Hey's saw was then applied at the lower end; and by this, and by chisel and hammer (the limb being supported), a piece of the shell was removed, and with it a piece of old living shaft beneath, with which it was firmly and vitally connected and continuous. It was of a triangular shape with the apex below. This liberated the lower end of the sequestrum, which I then carefully, and with very slight force, detached from the epiphysis above. (How important to the integrity of joints is the distinctness of anatomical structure of shaft and epiphyses!) It was then entirely removed; though small spiculæ have, from time to time, been discharged. The diathesis of the boy required Calc. repeatedly during the after-treatment. In the course of this, the thigh, which had been reserved for future sugical treatment, got quite well.

The deep pit left in the arm was washed out by a syringe, and filled with dry lint, and the limb secured on an angular inside splint. On suppuration setting in, the lint was removed from the wound, which was then dressed, — with the triple purpose of drainage, exclusion of air, and disinfection by non-medicinal means — thus: a large piece of doubled patent lint was saturated with glycerine, and laid on the wound, completely hiding it. Over this was placed a quadrangular piece of sheet-lead from a tea-chest. These were secured by adhesive straps round the limb. The openings at the elbow continued to discharge, and were encouraged to do so, and when the discharges demanded another exit, an opening was made for them where they pointed. The burrowing of pus in the forearm was prevented by a roller.

The limb was again laid on the splint, and confined to it by adhesive strips, and supported in a sling. All was renewed twice a week only. The wound granulated finely; the cavity is now filled, and the bone firm.

Calcarea[30 and 200] was given about once in a week or two, on account of his excessively blonde complexion, and evening exacerbations of hectic character; although, from the first, he went about everywhere, in good weather.

From sudden over-exertion during the first week he had a hæmorrhage of six or eight ounces of scarlet blood, for which he took a dose of China[200]. Some time after, on lying down, he had vertigo, as if the bed, etc., were whirling. He was relieved by a dose of a high dilution of Conium.

I have no doubt that the violent traction used in reducing the dislocated shoulder by his allopathic surgeon, was, with his diathesis, sufficient to detach the periosteum of the upper part of the humerus, and cause its death. Certainly, such men "live in glass houses."

UMBILICAL HERNIA.

In consultation with Dr. J. B. Wood, of Westchester, I saw Mrs. Z. She was corpulent, and had been confined some six months previously. From her first pregnancy, she had had an umbilical hernia. This was in Iowa. It was neglected, and became worse with the succeeding pregnancies. She had been fruitlessly endeavoring to retain the hernia by pads, etc.; often, in despair of this, she allowed it to remain and increase for several days. It was now three weeks since it last came out; it had remained irreducible, and there were symptoms of strangulation, though the bowels remained unobstructed. This, with the doughy feel and dullness on percussion, led to the diagnosis of epiplocele. Thus, then, the omentum had protruded, until the tumor was nearly as large as the fist. On its inferior aspect there were cutaneous sloughs, not separated; and, around and beneath these, great thickening of the integuments, with evident adhesion of the serous sac to its contents at these points. Manipulation produced flushing of face, and a choking sensation, which made her untie her nightcap strings, and have the win-

dows opened. Ordinary taxis had been vainly tried, both by herself and by Dr. Wood. I again applied it, but to no purpose.

On thinking over the case, I concluded that the first step must be to rupture the recent adhesions. This I did by pinching up the thickened and diseased integuments, and rubbing them gently between my thumb and fingers, whereupon I became conscious of separation. Then, while the umbilicus was made prominent by pressure on both sides of the abdomen by the hands of my colleague, I sought still farther to draw the sac of the hernia forwards and downwards, and away from its contents. At the same time, I firmly squeezed the tense portion of the tumor in my hand, and held it against the umbilical orifice, giving the whole a gentle rotatory movement.

The tumor steadily subsided for half an hour, when it vanished, except the loose integument, etc., which had inclosed it.

A flat disk of porcelain, a sugar-bowl lid, was then applied, and an adhesive strap of the width of the disk transversely over it. Two others were made to overlap this, above and below, covering the upper and lower edges of the disk; the ends of these three were secured by oblique straps. An elastic lace-band, to inclose and support the whole abdomen, was procured and applied. On account of the choking sensations, the sloughing, etc., she took Lachesis[200], in repeated doses. The dressing was to be renewed after she had recuperated somewhat; the sloughs to be treated with powdered white sugar. A recumbent posture was enjoined. Arnica was also used locally.

She has since done remarkably well. Whether the hernia can be radically cured, remains to be seen. Cutting operations are not admissible in such cases. The mode of taxis described is, I believe, original, and I have since used it successfully in original epiplocele.

STRANGULATED FEMORAL HERNIA.

In consultation with my friend, Dr. Samuel Brown, of this city, saw Mrs. X. For several years past she has had frequent protrusion of femoral hernia on the left side. Three days before, she stood in a railway station until she was quite exhausted, and felt weak about the crural ring. Next day, at the breakfast-table, the hernia protruded, and occasioned great pain, although the tumor was not large. She went to bed. Dr. Brown was called in, and used appropriate remedies. But she commenced to vomit stercoraceous matter. In consultation with him, I tested still farther Nux vom.[200], using taxis, aided by applications of ice; a large jar was used as a dry-cup to draw up the abdominal walls and contents, an expedient of utility in some cases; she was also placed upon the floor, with a pillow under her head, and her lower limbs raised upon the bed; but these efforts at taxis were all in vain. After three hours, it was determined to operate under etherization. An incision of two and a half inches was made from Poupart's ligament to the lower part of the tumor, cutting down to the sac, which, with its contents, so filled the space as to arrest further proceedings. A second incision was made from the place of beginning inward to the body of the pubis, over Gimbernat's ligament, which was now reached by the finger. I then bent the end of the grooved director, and insinuated it beside the hernia. I lifted the ligament upon it, and cut its edge with the bistoury, first making sure not to include the (possibly near) obturator artery. It was still impracticable to reduce the protrusion. I then opened the sac, and cut its neck in the same position as the ligament, again feeling with the finger for the obturator artery. The reduction was now easily accomplished. The edges of the wound being adjusted, leaden sutures were passed through the integument, strips of isinglass-plaster applied between, and, over all, a double fold of dry lint, secured by a

compress and figure of 8 bandage round the thigh and body, The dressing was not disturbed until after two days, when two sutures were removed, the remainder on the fourth day. Not a particle of pus was produced; the whole healed by first intention. No unpleasant symptoms occurring after the operation, no medicine whatever was given. The restoration was rapid, and it is to be hoped that the lymph effused has caused such obliteration of the crural opening as to prevent future recurrence of the hernia. The bowels moved comfortably within a day or two; sleep was natural from the first.

Several points I desire to note: First, the use of the bent director seems a novelty, and secured two objects, — safety and convenience in cutting Gimbernat's ligament. Second, the stricture was mainly at the neck of the sac itself, as is probably usual in chronic cases; whereas strangulation occurring with recent hernia is probably, in most cases, outside of the sac. In the former, the sac will usually require opening; in the latter, not. Third, after cutting the ligament, the obturator artery, if embracing the neck of the sac, is guarded by the end of the finger. Fourth, metallic sutures, and dry dressing so applied as to exclude the air, are conductive to primary union. Fifth, medicines should be withheld after operations, until morbid symptoms arise. Especially, opiates should never be employed as in allopathic routine. Sixth, nature "makes all things even" in due time, under judicious letting alone in such cases.

IN-GROWING TOE-NAIL.

Since writing the above, another important case has been concluded; constituting, in my opinion, something of a triumph in conservative surgery. The patient, a young lady, had been lame from childhood, by reason of an unrecognized iliac dislocation of the left hip. This threw much of her weight, in walking, upon the toes of the left foot. Wearing a tight shoe, she suffered from in-growing toe-nail, which came to be the worst case I

ever saw. The ulceration extended beneath each edge of the nail, and the exuberant granulations overlapped it so as nearly to meet above. The toe was very much inflamed, swollen, and painful. Teucrium marum verum was given, — I cannot say with any effect. Ipecac[6], one dose, was taken for some gastric trouble; besides this, she had no medicinal treatment.

The successful expedient was as follows: The first step was to get at the edges of the nail by thrusting scraped lint, saturated with glycerine, beneath the granulations on each side, two or three times a day. Cicatrization went on rapidly, though not the immediate object of this step. Within a few days, I had the satisfaction of seeing fully exposed, the edges of the nail, which the subjacent ulceration had completely detached from the matrix. With a pair of embroidery-scissors, I removed the whole of the detached portions, with but little pain; exposed the granulations beneath, and renewed the application of the lint and glycerine. This process was repeated whenever the growth of the nail threatened to again conceal the granulating matrix, until, in the course of a few weeks, I was enabled to dismiss the patient with a sound nail and matrix. I directed her to keep lint under the edges of the nail, dry, or moistened with glycerine, according to her sensations. She was also directed to wear a shoe which supported her foot in a horizontal position, and made to lace, over a tongue, the whole length of the foot. Inflammation was always controlled by wet applications, horizontal position, and rest.

I would ask attention, in conclusion, to two points: First, the influence of tight-toed stockings and shoes in causing ingrowing toe-nail; second, the needlessness of a revolting operation for its cure.

XIV.

PITTSBURG HOSPITAL CASES.

BY L. H. WILLARD, M.D., ALLEGHENY CITY, PA.

CYSTO-CARCINOMATOUS TUMOR.

On Nov. 14, 1867, Mary Lynch, married, aged thirty-five, was admitted to the lying-in department of the Homœopathic Hospital, Second Street, Pittsburgh. She had a tumor of the right breast, which was increasing gradually. Dr. Rousseau, the accoucheur, called a consultation, when it was determined to postpone operating till after her confinement. This took place on Dec. 9.

The tumor now began to increase rapidly, became darker, of a bluish color; threatening destruction to all the surrounding tissues. The pulse was getting weaker, and the appetite less.

Dec. 17. — The patient was placed under the influence of chloroform, and an elliptical incision was made, ten inches long, embracing all the diseased parts. The mamma, with the surrounding diseased tissues, was dissected out. The integument and underlying fascia above and below the wound, were dissected up; edges approximated with sutures and adhesive straps; body-bandage applied, and the patient placed in the recumbent position. The tumor weighed twelve pounds. Aconite and China were administered alternately, while Calendula lotion was applied externally.

Dec. 20. — Wound looked well; discharge offensive. Calendula continued; Bell. and China alternately.

Dec. 26. — During my absence, styptic colloid was applied to the wound with very good effect.

Feb. 22, 1868.—The wound having almost entirely healed, and the discharge being scarcely noticeable, she left the hospital.

As soon as this woman left the hospital, she started for her home, several miles up the Connellsville Railroad; walked two miles through the mud and slush, in a cold, drenching rain. The next day she had a high fever, with a cough.

Two months after the operation, she again applied for admission to the hospital, the carcinoma having made its appearance in the wound and in the axillary region. Great constitutional disturbance; no appetite, but unquenchable thirst. But little hope is entertained for her recovery.

CARIES OF THE TIBIA.

Dec. 27, 1867.—J. D., aged ten years, while playing shinty, about six weeks ago, was struck by one of his playmates with a stick on the right shin. An allopathic physician was called; the limb, somewhat swollen, was laid on a pillow, and poultices applied to allay the inflammation.

When brought to the Homœopathic Hospital, the leg was swollen considerably. Crepitation within an inch and a half of the ankle, and about an inch from the knee, revealed the fact that the blow had produced a comminuted fracture of the tibia. A profuse discharge of serous pus from openings corresponding to the seats of fracture led to the belief that the bone had become carious, which the probe verified. The examination was made by Dr. McClelland, who at once gave Silicia[30] three times per day.

Jan. 14, 1868.—The patient being under the influence of chloroform, an incision was made down to the bone, along the internal face, connecting the openings before mentioned. Placing my finger under the bone, it came out without any resistance: the portion taken away was four inches long, and badly carious. The jagged ends of the remaining portions were smoothed off with the bone-nippers. The wound was washed out, the edges

approximated with sutures and adhesive straps, and the limb placed in a fracture-box, with loose bran dressing. Aconite[6] was given internally; Calendula lotion applied externally.

Jan. 23. — Patient placed on nutritious diet, and Calc. phos.[30] given three times per day.

Jan. 28. — No pain; discharge healthy. Calc. phos.[30] continued.

Jan. 30. — On examination to-day, I found that the entire track of the tibia occupied by a substance hard and firm, like bone.

Examinations since have satisfied me entirely that the formation felt on Jan. 30 was bone.

A slight contraction of the tendo Achillis occurred during the after-treatment; which, although relieved, disappearing gradually the more the limb is used, prevents the heel from touching the floor by three-quarters of an inch, but does not prevent him from walking without the aid of crutches.

XV.

SURGICAL EXPERIENCES.

BY T. G. COMSTOCK, M.D., ST. LOUIS, MO.

ACUPRESSURE IN AMPUTATION OF LEG.

In the surgical wards of the Good Samaritan Hospital, in October, 1867, there was a young man who had been a soldier and who had suffered for more than two years from caries of the bones of the tarsus. In April, 1867, Chopart's operation was performed for his relief. After this amputation, the flap did not heal; and, upon a careful examination, the astragalus was found to be carious. A second amputation was found to be requisite.

October 17, 1867.—In the presence of the surgeons of the hospital and several others, I amputated at the lower third of the leg, making the flap operation of Mr. Ferguson. The anterior tibial artery was immediately secured, by means of an acupressure needle, without any difficulty. The posterior tibial and peroneal arteries were also similarly secured, although some little delay and difficulty was experienced in finding them, from the fact of their retracting to an unusual degree. I stated, before making the operation, that I employed acupressure in preference to ligatures, in order to effect union by first intention, and hence this first trial; for, previous to this date, this new means of dispensing with the ligature of Ambrose Paré had never been tried in the wards of our hospital. The needles were inserted into the cutaneous surface of the flap, so as to cross over, and compress the bleeding artery a few lines above

its open mouth, in the same way that a rose is pinned to the lapel of a coat. The needle was then pressed through the flap, from its cut surface outwards, so that its point issued through the cutaneous surface. The flap was not closed for three-quarters of an hour, until all the little blood-vessels had ceased to bleed, as by this delay union by first intention becomes much more certain. The flaps were then brought together, and secured by metallic sutures of silver wire, instead of silk. Forty-eight hours after the operation, the acupressure needles were withdrawn without any accident. The case went on well; no great suppuration supervened.

The stump healed by first intention; and the patient left the hospital a few weeks after, perfectly well. The great advantage of acupressure over the ligature is, that the ligature, being left as a foreign body in the wound, will of course act as a focus of irritation, and can only be cast off by means of suppuration; in addition to this, the extremity of the artery, at and below the point where the ligature is applied, must die, and be also eliminated, by suppuration. All this is obviated by acupressure. It is found by experience that it is safe to remove the needles in from eight to twenty-four hours after their application; and that, in the majority of cases where this means is used, union of the flaps by first intention will be the result. Acupressure may be employed in several different ways; and we believe it may be advantageously applied in the ligation of arteries, without even cutting down to them. This may be done by introducing the needles from the surface, by transfixion, and partial rotation, thus compressing the artery, and bringing the point only of the needle through the skin.

In aneurisms of the popliteal, carotid, and other smaller arteries, this proceeding is worthy of a trial. In fine, it is safe to predict that acupressure will be used more frequently and will be found far safer than the ligature. I believe it to be one

of the greatest improvements in modern surgery. To Sir James Y. Simpson belongs the merit of this invention.

FISSURE OF THE ANUS.

This affection is often mistaken for internal piles, and treated as a trivial matter. It is really one of the most important lesions with which the surgeon has to deal. It is often pronounced a simple excoriation or a hæmorrhoidal tumor; it may last for years before its real nature is recognized. It happens in females much more frequently than in males, and may be passed over as a trifling ailment, and even be attributed to hysteria. There is however, no other disease where the surgeon can promise so much from an operation as the one in question.

Within the last four years, I have known of four instances of this complaint in married ladies, where its existence was the cause of sterility. I know of no author, except Dr. Baker Brown, who has given instances confirmatory of my experience. In the cases in question, the patients were subjected to the most agonizing tortures, before, during, and after defecation. Three of these cases I have reported in the forthcoming edition of Dr. Hale's work upon abortion, and I will not therefore speak of them in detail. Suffice it to say a perfect cure followed the operations for fissure, and the patients became pregnant. In the fourth case, the result of which has come under my observation quite recently, the patient, a married lady, had had hypertrophy of the cervix uteri for twelve years, and during this time was not pregnant, although she had previously borne three children. For three years past, she had had, as she supposed, internal piles; upon examination, they proved to be a double fissure of the anus. To relieve her of this, I made two different operations within three weeks of each other. The fissures were perfectly cured, and her health, notwithstanding the hypertrophy of the cervix, was greatly improved. In less than one year after the operations she became pregnant.

Fissure of the anus is, I believe, seldom cured without resorting to the knife. In former years, I have tried every means in our art, not even neglecting the vaunted cucumber ointment emollient and astringent salves, extract of hamamelis, etc., but without effecting a cure. In making the operation, the folds of the anus must be separated, and then just within the margin of the anus, a fissure, crack, or chap will be discovered, which frequently extends up from a half an inch to an inch. This fissure must be freely divided with a sharp-pointed curved bistoury. Formerly it was thought best to divide the sphincter but this is seldom necessary, though in some cases it may be required; it may be divided subcutaneously with a tenotomy knife, as directed by Dr. Warren. If the fissure is of long standing and its walls are callous, or an ulcer is situated upon its anterior part, as sometimes happens, it is then best to seize with forceps the ulcer or callous portion, and carefully excise it from without inwards with a pair of sharp-pointed scissors.

The operation for fissure is always followed by relief, and a perfect cure is the result. Baker Brown reports operating in more than one hundred instances, and all were successful. A second operation is occasionally necessary, especially if a second fissure should be present, let it be ever so small and insignificant. In a few instances that I have seen, the fine, sharp point of a stick of nitrate of silver effected a cure of a smaller fissure. In the past eleven years, I have had ten or eleven cases where I have operated with a successful result.

That diseases of the rectum and anus, especially prolapsus and fissure, may cause sterility is an interesting fact; and I should be glad to learn the experience of my honored colleagues, members of the Institute, upon this subject.

XVI.

CARIES OF THE ANKLE-JOINT.

BY J. H. MCCLELLAND, M.D., PITTSBURG, PA.

I WAS called to see James S——, aged thirteen, who was suffering with caries of the ankle-joint. The disease commenced about six or eight months before, during which time he had been under allopathic treatment. The ankle presented the usual appearance of caries and necrosis, — swelling, pain, distortion, and numerous fistulous openings. The probe revealed the fact, already apparent, that the ends of the tibia and fibula, and also the astragalus, os calcis, and upper row of the tarsal bones, were involved to such an extent that even excision was not justifiable and the only remedy was amputation. The patient was weak, emaciated, and suffered extremely. He was much improved and relieved by Bell.[6] followed by Calc.[30 and 200].

The leg was amputated at the lower third by the flap operation; the arteries secured with silk ligatures; the wound washed with a weak solution of Calendula, and allowed to remain open for a short time in order to become glazed, and then closed in the usual manner with sutures and adhesive strips; after which a dry dressing was applied.

Arn., Acon., and Bry. were administered at different times, as indicated, during the first two or three days; then he took Calend.[3] internally. The wound healed almost by first intention; not more than a tablespoonful of pus came from the stump. All the ligatures but one were removed before the seventh day; this one remained till about the fourteenth day.

At the end of two weeks he walked about on crutches, the wound being almost entirely healed, and the stump firm and round. The boy's health began to improve immediately, and he is now perfectly well.

Drs. Burgher, Hofmann, Willard, and others, were present, and rendered the necessary assistance in the operation.

SECTION VI.

REPORT

OF THE

BUREAU OF ORGANIZATION, REGISTRATION

AND

STATISTICS:

HENRY M. SMITH, M.D. - - - - - - - - - - - New York.
HORACE M. PAINE, M.D. - - - - - - - - - - Albany, N. Y.
BUSHROD W. JAMES, M.D. - - - - - - - - - - Philadelphia.
W. F. JACKSON, M.D. - - - - - - - - - - - Roxbury, Mass.
T. CATION DUNCAN, M.D. - - - - - - - - - - Chicago.

TO THE

TWENTY-FIRST SESSION

OF THE

American Institute of Homœopathy.

VOLUME I. NUMBER 2.

CONTENTS.

V. General Report of the Bureau.
VI. Report of the Committee of Foreign Correspondence.
VII. Report of Bushrod W. James, M.D., Delegate to Paris.
VIII. Reports of Homœopathic Institutions: —
1. State Societies.
2. County and Local Societies.
3. Hospitals, Infirmaries, etc.
4. Dispensaries.
5. Colleges.
6. Medical Journals.

V.

GENERAL REPORT OF THE BUREAU.

ORGANIZATION.

In presenting their third annual report, the members of the Bureau would congratulate the Institute on the practical results of the present organization.

To our present Secretary, as Chairman of this Bureau for 1866, the Institute is indebted for the present system of Bureaus, by which the working force of the Institute is classified, as well as developed. The volume of Transactions for 1867 gives evidence of the success as well as importance of this plan. The value of this work is seen by an examination of its many interesting and instructive papers. To this efficient officer also are the thanks of the Institute due for the excellent manner in which the volume is arranged and published.

The Bureau would recommend that some of the resolutions adopted at the sessions of 1866 and 1867 be incorporated into the by-laws, and that the latter be amended as follows:

Article II. to be amended by an additional section, to wit:

Sect. 2. The Officers of the Institute, — viz., the President, Vice-President, General Secretary, Provisional Secretary, and Treasurer — shall constitute an Executive Committee, which shall arrange the order of business at the meetings of the Institute; attend to matters of business not otherwise specially provided for; and perform such other duties as may, by vote of the Institute, devolve upon it. It shall also constitute the Publishing Committee.

ARTICLE IX. to be amended by the addition of the following sections:

SECT. 2. Properly accredited delegates, being physicians, shall be admitted by the Institute to all the privileges of members, except eligibility to office, on the following basis:

First. From every association composed of more than fifty members from different States, two delegates, with an additional delegate for every twenty additional members.

Second. From every State society, two delegates, with an additional delegate for every twenty members.

Third. From every county or local society, one delegate.

Fourth. From every college, hospital, or dispensary actually established, one delegate.

Fifth. From every medical journal published, one delegate.

Such delegates shall be elected for the term of one year.

It shall be their duty to present to this Institute, through its proper Bureaus, a clear synopsis of the doings of their respective associations.

SECT. 3. Of State societies represented in the Institute, the Presidents shall be *ex officio* Vice-presidents, and the Recording Secretaries shall be *ex officio* Corresponding Secretaries, of the Institute. It shall be the duty of these officers to communicate to the General Secretary any facts or information concerning the condition of these societies, and the progress of homœopathy in their several States.

SECT. 4. Any foreign homœopathic physician may be elected a Corresponding Member of the Institute at any meeting; and the Institute may, at any annual meeting, elect as Honorary Members, not to exceed five in one year, any foreign homœopathic physicians who may be judged worthy, from their superior attainments in medicine; provided that the names of persons proposed for honorary membership shall have been presented, through the Board of Censors, at a previous annual meeting.

Such Corresponding and Honorary Members shall not be entitled to vote, nor be eligible to office.

SECT. 5. Members and delegates shall be required to pay annually the sum of five dollars towards defraying the expenses of the Institute.

ARTICLE X. to have the following amendments:

SECT. 1, to be amended to read, — There shall be a Bureau of Materia Medica, Pharmacy, and Provings, consisting of one member from each State represented in the Institute, which shall obtain facts relating to the materia medica and pharmacy; and institute, collect, and arrange provings of drugs.

SECT. 2, to be amended to read, — There shall be a Bureau of Clinical Medicine, to consist of one member from each State represented in the Institute, which shall collect facts relating to clinical medicine generally, and especially to any endemic or epidemic diseases which may exist in the country.

SECT. 3, to be amended to read,—There shall be a Bureau of Obstetrics and Diseases of Women and Children, which shall collect and report to the Institute facts and observations on subjects pertaining thereto.

The same Article to have sections added as follows:

SECT. 8. There shall be a Bureau of Medical Jurisprudence and Psychology, which shall report upon these subjects.

SECT. 9. There shall be a Bureau of Necrology, which shall prepare biographies of homœopathic physicians, members of the Institute and others, deceased.

SECT. 10. There shall be a Bureau of Correspondence, of which the General Secretary shall be a member *ex officio*, which shall have charge of the correspondence with physicians and societies in foreign countries.

Each of these Bureaus, unless otherwise provided, shall consist of five members, to be appointed annually by the President, with the advice of the other members of the Executive Committee; and, if any member of a Bureau shall resign, or decline

to serve, the Chairman of the Bureau shall fill the vacancy, and notify the General Secretary of the fact.

The Chairmen of similar Bureaus in State Societies, represented in the Institute, shall be *ex-officio* Corresponding Members of these Bureaus.

REGISTRATION.

Herewith the Bureau presents a register of homœopathic physicians, arranged according to States. Incomplete and incorrect as it must be, it is submitted to the members of the Institute in order that the errors may be corrected, and the omissions supplied.

In connection with the Committee of Arrangements of the meeting of 1867, the Bureau issued circulars to all the homœopathic physicians whose address it had, requesting them to furnish certain information whereby the list might be corrected and completed. Of more than four thousand of these circulars, only one hundred and fifty were returned through the dead-letter office, and only about two hundred replies were received.

Physicians have received so many circulars from persons "about to compile a homœopathic directory" that they give but little attention now to any such. Were they assured that the Institute would publish the list with its Transactions, and that their names therein would serve as a guarantee to the public of their professional standing, most of them would see that their names were correctly printed.

The publication of the "Homœopathic Record" has been indefinitely postponed, as it was ascertained that it could not probably be made self-sustaining at present.

There is still a necessity for a complete Homœopathic Register; and, believing that such a work can be prepared better under the auspices of the Institute than by private individuals, this Bureau recommends;—

That there be published every three years, with the volume of Transactions, a Catalogue or Directory, to embrace; —

First. A list of all the homœopathic physicians, arranged alphabetically, with the names of the members of the Institute in some distinguishing type, with a short sketch of their professional career; giving time and place of graduation, position held in medical societies or institutions, books or articles written on medical subjects, when and where published, etc., etc.

Second. Histories of homœopathy in the several States; the title, date of organization, and everything regarding the homœopathic societies, institutions, etc. List of physicians, arranged by towns, with names of members of State societies distinguished.

Third. List of homœopathic publications, including books, pamphlets, reports, etc.

Fourth. Index to American homœopathic periodicals.

Fifth. Index to American homœopathic provings, or index to the materia medica.

Sixth. Statistics.

Seventh. Necrological record.

In addition to these sections, others that may be suggested as furnishing information to members of the Institute.

STATISTICS.

Although within the scope of this Bureau to present statistics of treatment, etc., it has as yet done nothing in this department. The reports of societies, hospitals, dispensaries, colleges, journals, etc., so far as received, are herewith transmitted.

VI.

REPORT

OF THE COMMITTEE OF FOREIGN CORRESPONDENCE.

THE Committee to which was assigned the duty of corresponding, in the name of the American Institute of Homœopathy, with homœopathic physicians of Europe, South America, Australia, and the West Indies, and inviting them to form National Institutes in their respective countries, and to enter into correspondence with the Institute, etc., etc., respectfully report:

Soon after the adjournment of the Institute in 1867, the Committee agreed upon a circular letter, to be addressed to the officers of homœopathic societies and to homœopathic physicians generally throughout the world. Translations of this circular into French and German were prepared, specimens of all of which are herewith presented; and the labor of correspondence was divided as follows:

Dr. T. S. Verdi to correspond with French and Italian physicians and societies.

Dr. B. de Gersdorff, with German physicians and societies.

Drs. I. T. Talbot and Carroll Dunham with the physicians of Great Britain, Spain, South America, Australia, and the West Indies.

The reports of these sub-committees are appended.

CARROLL DUNHAM,
TULLIO S. VERDI,
I. T. TALBOT,
B. DE GERSDORF.
Committee of Correspondence.

CIRCULAR.

THE AMERICAN INSTITUTE OF HOMŒOPATHY.

Committee of Correspondence.

UNITED STATES OF AMERICA, July, 1867.

At the twentieth session of the American Institute of Homœopathy, held in the city of New York, on the 5th, 6th, and 7th days of June, 1867, the following resolution was unanimously adopted:

"*Resolved*, That the American Institute of Homœopathy invites the homœopathic physicians of Europe, South America, Australia, and the West Indies to form, in each respective country, a National Institute, similar to the American Institute; and expresses the wish that these Institutes may communicate with each other, and exchange, as far as possible, homœopathic publications.

"Also, that, once in five or ten years, these Institutes may assemble by delegates in some large city, to hold a general congress for the purpose of promoting the interests of homœopathy."

To the undersigned Committee was intrusted the duty of extending and expressing, in the name of the American Institute of Homœopathy, the invitation and the desires embodied in the above resolution.

The homœopathic physicians of the United States have derived much benefit from the organization of societies and associations, which, although in most respects independent of each other, yet work together in harmony for a common object. Thus, for example, in the State of New York, in which the number of homœopathic physicians now exceeds eight hundred, there is a homœopathic medical society in each county. By these county societies, delegates are elected to the Homœopathic

Medical Society of the State. These County and State societies are a part of the government of the State of New York, having control over certain matters relating to the medical profession; and they exercise and enjoy equal rights, powers and privileges with similar allopathic societies. In many other States of the Union similar homœopathic medical societies exist.

The American Institute of Homœopathy was founded in 1844. It is composed of delegates from the above-mentioned societies, and from the homœopathic colleges, hospitals, dispensaries and journals of the United States, as well as of permanent members. Any duly qualified homœopathic physician may become a member of the Institute. There are now more than three thousand homœopathic physicians in the United States, of whom nearly one-fourth are members of the Institute.

The meetings of the Institute are held annually in one of the larger cities of the United States. They continue for several days, and the time is occupied chiefly in hearing and discussing the reports of committees on special subjects, and those of the various permanent Bureaus of the Institute. These Bureaus are, at present, eight in number, viz. Bureau of Surgery, of Materia Medica, of Clinical Medicine, of Obstetrics, of Anatomy, of Physiology, of Hygiene, and of Statistics.

Sensible of the advantages of every kind which have resulted from these organizations, the physicians of the United States, as represented by the American Institute of Homœopathy, desire to call the attention of their colleagues in other lands to these advantages, as well as to avail themselves of the benefits that would be derived from a still more comprehensive organization of all of the homœopathic physicians throughout the world.

In their name, we invite you to form, if such do not already exist in your country, a national association similar in character to the American Institute, and to exchange communications with us. On receipt of your acknowledgment of our invitation, we shall be happy to send to your national association copies of

the Transactions of the American Institute, as well as to receive the publications of your national society.

And we should be pleased to learn your views respecting the International Congress proposed in the resolution of the American Institute.

Awaiting your reply, we have the honor to remain, with sentiments of great consideration and esteem, your friends and colleagues,

CARROLL DUNHAM, M.D., New York, N.Y.
TULLIO SUZZARA VERDI, M.D., Washington, D.C.
I. T. TALBOT, M.D., Boston, Mass.
B. DE GERSDORFF, M.D., Salem, Mass.
Committee of Correspondence.

REPORT

OF CORRESPONDENCE WITH SOUTH-AMERICAN, WEST-INDIAN, SPANISH, AND BRITISH PHYSICIANS, ETC.

THE undersigned has addressed copies of the Circular Letter prepared by the Committee to the following societies and physicians:

Homœopathic Society of Brazil, Dr. Muralles, Sec'y.

To twenty-four physicians at Valparaiso, Buenos Ayres, Pernambuco, Bahia, Santiago, Montevideo, Maranham, Rio Grande, and Rio de Janeiro.

To the homœopathic society at Madrid, Dr. Nuñez, Pres.; and to forty-three physicians of Spain.

To thirteen physicians in the Spanish and British West Indies, three physicans in Australia, one at Cape of Good Hope.

To seven homœopathic societies and one hundred and seventy-eight physicians in Great Britain.

From Spain, South America, West Indies, and Australia, he has received no reply whatever. From England, letters have been

received from several individual physicians, acknowledging receipt of the circular, and expressing cordial good-will and sympathy in the movement. The homœopathic journals republished the circular, with expressions of approbation, and of a desire to co-operate with the Institute in the ways proposed. Dr. Moore, of Liverpool, England, who will be present at the meeting of the Institute, is charged by the homœopathic society of Liverpool, England, to express its desire to unite with the Institute in the propagation of homœopathy, but to state that, in the opinion of the Society, homœopathy is not yet in a position, in England, to form a national association, as proposed. But Dr. Moore, it is expected, will himself more fully represent to the Institute the views of his colleagues.

The undersigned would suggest that, as the annual meetings of societies to which the Committee addressed itself, occur chiefly during the summer, there has not been time for formal action on the subject. He would, therefore, respectfully submit the propriety of continuing the Committee of Correspondence for another year.

CARROLL DUNHAM,
Chairman of the Committee.

The following letter was received from Italy:

MILAN, ITALY, Jan. 2, 1868.

To Tullio Suzzara Verdi, M.D., of the Committee of Foreign Correspondence of the American Institute of Homœopathy:

HONORABLE CONFRÈRE, — I have received, from your esteemed brother in Milan, several copies of the "Circular of the Committee of Foreign Correspondence" of the American Institute of Homœopathy," of which you are a worthy member.

In pursuance thereof, on the 2d of December, 1867, I called a meeting of the homœopathic physicians of Milan for action. We met, and unanimously adopted your recommendations.

I am delighted now to offer you our thanks and our fraternal greetings. We received your recommendations with a sentiment of gratitude for the interest you take in our welfare, and

in the advancement of our science. Your noble endeavors will promote a better understanding and more fellowship among us than have heretofore existed.

At that meeting we adopted a plan to initiate the movement you desire to be universal in the fraternity. We immediately organized ourselves into a society in Milan; then we addressed ourselves to Dr. Comini, in Venice, enclosing your circulars, recommending that a similar society should be organized, embracing the Venetian territory; also to Dr. Dadea, in Turin, for Piedmont; to Genoa, for the Genoese territory; to Dr. Bertazzi, in Florence, for Tuscany. At the same time, we sent to Dr. Pompili, of Rome, with whom you are already in correspondence, to organize societies in Central and South Italy and Sicily.

There was an apprehension that the unsettled state of political affairs in our country would work against the success of the undertaking; but, after due consideration and the advice of many of our eminent practitioners, the plan was considered practical and now it is already in a fair way to success.

Dr. Pompili, of Rome, engages himself to heartily co-operate with us, and will soon publish in the *Homœopathic Review*, of which he is the worthy editor, the organization of each society, as you recommend.

Our society in Milan has already given notice of its existence to all the homœopathic physicians in the provinces, with an earnest request that they should join. From all parts we receive their approval; and they accept our installation as the beginning of a new era of progress for homœopathy in Italy, where it had lain almost dormant.

Homœopathy was introduced in Italy about forty years ago, by the surgeons of the Austrian army. Naples and Rome were the first, however, to try its merits. The wonderful cure of Marshal Radetzsky, then the Generalissimo of the Austrian army in Italy, by Surgeon Hartung, shook Milan from that sleep to which the ancient potions had subjected her.

It is a pity that the hatred of the Austrians for the Italians was shared by the medical fraternity. Many of the surgeons were homœopathists, but would not impart their knowledge and experience to Italian physicians. This unprofessional conduct had the effect to greatly retard the progress of homœopathy in the then Lombardo-Venetian kingdom.

The day of deliverance came, however; and with the evacuation of Venice came a freedom of thought and action which greatly promoted the advancement of the new science. We challenged the old school, and brought discussion into the forum; homœopathy came out with the laurels of success.

We count now six homœopathic physicians of good standing in Milan. There is one in Brescia; one on the Lago Maggiore; one in Como; two at Pavia, who are attached to that old and great medical university; and many are settled in town and villages.

The members of our society are, at present, Drs. Bruni, Conti, Dugnani, Matureno, and Pagliano, all residents of Milan.

The *Rivista Omiopatica*, published by Dr. Pompili, of Rome, will be the official organ of all the societies; and Rome will be the seat of the 'National Institute' which we hope soon to organize.

You sent across the Atlantic the spark that aroused the members of our profession from their indifference and inactivity. We thank you, and, through you, all the members of the American Institute of Homœopathy, with the assurance that we will use our best endeavors to elevate homœopathy to the noble position it occupies in your country.

We will keep you informed of our progress, and hope that, in a few years, the interchange of fraternal sentiment, of thoughts and experience, will make us one great body of men working for the same end, joined by the most sacred ties of brotherhood.

For the Committee of Lombardy.

GIUSEPPE BRUNI, M.D.

VII.

REPORT

OF BUSHROD W. JAMES, M.D.,

Delegate from the American Institute of Homœopathy to the International Homœopathic Medical Congress, held in Paris, France, August, 1867.

YOUR delegate begs leave to report that he attended the sessions of the International Homœopathic Medical Congress, presented his credentials, which were duly recognized, and he was admitted a member of the body. He was appointed to report upon the subject of the progress of homœopathy in America; and, accordingly, a paper was prepared upon that topic and presented. It was accepted, and appears in the published Transactions of the meeting.

The Congress convened on the 9th of August, and was composed of representatives from the various parts of France, from Spain, Italy, Germany, Austria, Russia, England, and the United States. Prof. Imbert Gourbeyre, of the College Clermont-Ferrand, was chosen the presiding officer, and the venerable Marquis de Nuñez, of Spain, was made President of Honor. The other officers were,—Vice-Presidents, Dr. Hirschel, of Dresden, and Dr. Rapp, of Würtemburg; General Secretary, Dr. L. Molin, Paris; Associate Secretaries, Drs. Landray, Chapusot, Bernard, and Curie, of Paris; Treasurer, Dr. Dezernaux, of Paris; Archivist, Dr. Cramoisy, of Paris. Considerable discussion occurred upon the question of dose, without, how-

ever, arriving at any settlement of the vexed points appertaining thereto.

Various papers were read upon different branches of medical science, and discussion allowed thereon. They appear in the printed Proceedings of the Congress, a copy of which I herewith present to the Institute.

As a suggestion to this society, I would recommend that, in due time, proper steps be taken by it to have, in the course of five or six years hence, another International Homœopathic Medical Congress held, in which all nations, wherever homœopathy has gained a foothold, shall be represented, and to which every homœopathic medical organization in the world shall be invited to send delegates, communications, and statements; the said Congress to be held in some large city in the United States, and that it have full power to decide upon a proper basis and standard of homœopathic medical education, and such other points as may advance the best interests of our profession, and give an additional impetus to the progress of our noble science.

Respectfully submitted.

BULHROD W. JAMES, M.D.

PHILADELPHIA, May 23, 1868.

VIII.

REPORTS OF HOMŒOPATHIC INSTITUTIONS.

1. — STATE SOCIETIES.

THE WESTERN INSTITUTE OF HOMŒOPATHY.

J. P. Dake, M.D., } Delegates.
G. D. Beebe, M.D., }

THE fifth annual meeting of this body was held in Milwaukee, May 21 and 22, 1868. The meeting was large, members being present from ten different Western States. Thirteen papers were read, none of them, however, on the four subjects for which prizes of one hundred dollars each were offered last year. Subjects were assigned to twenty-one members, on which they are to report at the next annual meeting, to be held at Ann Arbor, Mich., May 20, 1869. Those who fail to report are to be fined twenty-five dollars each.

The following are the officers: —

J. P. Dake, M.D., Salem, O., President.
J. T. Boyd, M.D., Indianapolis, Ind., 1st Vice-President.
P. H. Worley, M.D., Davenport, Iowa, 2d Vice-President.
T. C. Duncan, M.D., Chicago, Ill., Recording Secretary.
E. A. Lodge, M.D., Detroit, Mich., Corresponding Secretary.
G. W. Perrine, M.D., Milwaukee, Wis., Treasurer.

THE MAINE HOMŒOPATHIC MEDICAL SOCIETY.

W.E. Payne, M.D., } Delegates.
G. H. Morrill, M.D., }

This society held its first annual meeting in Bangor, May 20,

1868. Homœopathy is flourishing in the State. The number of members of the Society is thirty-two. The next annual meeting is to be held in Bath, May 18, 1869.

The following are the officers: —

C. H. Burr, M.D., Portland, President.
H. B. Eaton, M.D., Rockport, } Vice-Presidents.
R. R. Williams, M.D., North Vassalboro', }
C. A. Cochran, M.D., Winthrop, Recording Secretary.
J. M. Blaisdell, M.D., Bangor, Corresponding Secretary.
F. W. Payne, M.D., Bath, Treasurer.
Wm. Gallupe, M.D., Bangor, }
E. F. Hincks, M.D., Thomaston, }
J. W. Savage, M.D., Wiscasset, } Censors.
S. P. Graves, M.D., Saco, }
G. P. Thompson, M.D., Yarmouth, }

THE HOMŒOPATHIC MEDICAL SOCIETY OF NEW HAMPSHIRE.

J. F. Whittle, M.D., } Delegates.
E. Custer, M.D., }

The fifteenth annual meeting was held in Concord, June 16, 1868. The entire number of members has been about forty, of whom there are now but seventeen resident in the State. Much effort has lately been made to induce the remainder of the thirty homœopathic practitioners to unite with the society. The supply of homœopathic physicians in the State is not equal to the demand. Many important places have no homœopathic physicians. Manchester, with twenty-five thousand inhabitants, and Portsmouth, with ten thousand, have but one each.

The officers for 1868–9 are: —

A. Morrill, M.D., Concord, President.
E. Custer, M.D., Manchester, Vice-President.
J. H. Gallinger, M.D., Concord, Treas., Sec., and Librarian.
L. T. Weeks, M.D., Laconia, } Councillors.
Francis Brick, M.D., Keene, }
I. P. Chase, M.D., Henniker, }
J. F. Whittle, M.D., Nashua, }
D. F. Moore, M.D., Lake Village, } Censors.
J. P. Whittle, M.D., Weare, }
S. C. Morrill, M.D., Concord, }

THE VERMONT HOMŒOPATHIC MEDICAL SOCIETY.

G. E. E. Sparhawk, M. D.,
C. B. Currier, M.D.,
J. H. Jones, M.D., } Delegates.

This society, now containing about seventy active members, is several years older than its permanent organization, which took place in 1854, with but twenty members; of these many, especially the pioneers, have passed away. They live in the hearts of their fellows, and in the remembrance of the communities in which they introduced the peaceable doctrines of "Similia." Several accessions from the allopathic school have come to us in the year past.

The State has granted a charter for a homœopathic medical school. The constantly increasing number of summer visitors, inhabitants of cities, to the health-giving hills of Vermont, has done much to extend homœopathy; and, in the past year its growth has been more rapid than ever before. The people are generally a reading people; and it is seldom that any of them renounce homœopathy, even when its practitioners are no longer accessible. The Society is preparing to publish a complete history of the rise and progress of homœopathy in Vermont, and hope to have it ready in 1869.

Its officers are: —

C. B. Currier, M.D., Middlebury, President.
C. W. Scott, M.D., Lyndon, Vice-President.
H. M. Hunter, M.D., St. Johnsbury, Secretary.
L. H. Thomas, M.D., Waterbury, Treasurer.
G. E. E. Sparhawk, M.D., Gaysville, Auditor.

THE MASSACHUSETTS HOMŒOPATHIC MEDICAL SOCIETY.

Samuel Gregg, M.D.,
Milton Fuller, M.D.,
George Russell, M.D.,
David Thayer, M.D.,
I. T. Talbot, M.D., } Delegates.
H. L. Chase, M.D.,
C. Wesselhoeft, M.D.,
Henry B. Clarke, M.D.,
G. W. Swazey, M.D.,

The Society held its twenty-eighth annual meeting at Boston, on the 15th and 16th of April, 1868. Of the one hundred and thirty-five members of this Society, about a hundred were present. The number of homœopathic physicians in the State is three hundred. The system is in a vigorous and flourishing condition. Within the past year this Society has completed a handsome volume of serial publications of about six hundred pages It looks not over its shoulder backward, but, in spite of the opposition of Puritanic and Harvard conservatism, steadily "goes marching on."

Its officers are: —

H. L. Chase, M.D., Cambridge, President.
Conrad Wesselhoeft, M.D., Boston, 1st Vice-President.
H. B. Clarke, M.D., New Bedford, 2d Vice-President.
E. U. Jones, M.D., Taunton, Corresponding Secretary.
L. Macfarland, M.D., Boston, Recording Secretary.
T. S. Scales, M.D., Woburn, Treasurer.
J. T. Harris, M.D., Roxbury, Librarian.

David Thayer, M.D., Boston,
Francis H. Krebs, M.D., Boston,
Henry C. Angell, M.D., Boston,
C. H. Farnsworth, M.D., E. Cambridge,
Daniel Holt, M.D., Lowell,
} Censors.

THE CONNECTICUT HOMŒOPATHIC MEDICAL SOCIETY.

C. H. Skiff, M.D.,
C. C. Foote, M.D.,
C. E. Sanford, M.D.,
} Delegates.

The Society consists of thirty-five active members. One, Dr. E. P. Mosman, of Norwich, died the past year. The average attendance at the meetings is about fifteen, with a general increase of interest in the doings of the Society.

Its officers are: —

J. H. Austin, M.D., Bristol, President.
W. W. Rodman, M.D., New Haven, Vice-President.
H. E. Stone, M.D., Fair Haven, Corresponding Secretary.
E. C. Knight, M.D., Waterbury, Recording Secretary.
C. E. Sanford, M.D., Bridgeport, Treasurer.
G. H. Wilson, M.D., W. Meriden, Librarian.

J. H. Austin, M.D., Bristol,
W. E. Bulkley, M.D., Danbury,
C. Vishno, M.D., Windsor Locks, } Censors.
C. C. Foote, M.D., New Haven,
C. H. Skiff, M.D., New Haven,

THE HOMŒOPATHIC MEDICAL SOCIETY OF THE STATE OF NEW YORK.

J. Beakley, M.D.,
G. E. Belcher, M.D.,
E. M. Kellogg, M.D.,
H. M. Smith, M.D.,
H. D. Paine, M.D., } Delegates.
T. F. Allen, M.D.,
R. McMurray, M.D.,
A. S. Ball, M.D.,

The seventeenth annual meeting was held at Albany, Feb. 11, 12, and 13, 1868. It was well attended, and many able papers, some from honorary members, were presented. Twenty county societies were represented, and reports were presented from several others. The Society being in debt, it was decided to increase the annual assessment to the amount of three dollars.

In consequence of an unauthorized publication in the Transactions of last year, which was alleged to contain statements unsupported by facts, provision was made against the repetition of such an occurrence. Attempts are being made to prevent further admission to the practice of medicine in the State, except after examination by a State Board of Censors, a majority of whom shall be taken from neither of the recognized schools. A Homœopathic Retreat for the Insane has been established at Margarettville, Delaware Co., by H. Doty, M.D., and several successful cases of treatment there have been reported. Considerable effort has been made to secure homœopathic treatment in a State institution for the insane, to be located in one of the southern tier of counties. The annual address, by the President, B. F. Cornell, M.D., was occupied with some of the causes of modern degeneracy: the improper use

of alcohol, opium, and tobacco, and improprieties in ventilation, food, dress, and intercourse.

The officers are: —

W. H. Watson, M.D., Utica, President.
T. F. Allen, M.D., New York, 1st Vice-President.
T. L. Brown, M.D., Binghamton, 2d Vice-President.
D. F. Bishop, M.D., Lockport, 3d Vice-President.
H. M. Paine, M.D., Albany, Recording Secretary.
E. D. Jones, M.D., Albany, Corresponding Secretary.
W. S. Searle, M.D., Troy, Treasurer.

John Sarle, M.D., North Granville,
L. M. Pratt, M.D., Albany,
R. D. Bloss, M.D., Troy,
Albert Wright, M.D., Brooklyn,
A. S. Ball, M.D., New York,
H. D. Paine, M.D., New York,
L. B. Wells, M.D., Utica,
H. Robinson, Jr., M.D., Auburn,
T. D. Stow, M.D., Fulton,
L. M. Kenyon, M.D., Buffalo,
C. Ormes, M.D., Jamestown,
G. W. Lewis, M.D., Buffalo,
} Censors.

THE HOMŒOPATHIC MEDICAL SOCIETY OF THE STATE OF NEW JERSEY.

J. J. Youlin, M.D., Delegate.

This Society was organized in 1850. Notwithstanding the efforts of the old school to prevent it from gaining a legal status, it obtained, in 1854, the enactment of a law placing homœopathic and allopathic practitioners on equal footing. The Society was re-organized in 1868, and hopes soon to obtain an act of incorporation. It is now in good working trim, with twenty-three members. There are very many homœopathic practitioners in the State who are not yet members. The next annual meeting is to be at Newark, April 15, 1869.

The officers are: —

J. J. Youlin, M.D., Jersey City, President.
Alex. Kirkpatrick, M.D., Burlington, 1st Vice-President.
Frank Nichols, M.D., Hoboken, 2d Vice-President.
Oscar Bingham, M.D., Washington, 3d Vice-President.

S. B. Tompkins, M.D., Newark, Recording Secretary.
L. D. Ennis, M.D., Newark, Corresponding Secretary.
C. F. Fish, M.D., Newark, Treasurer.

J. D. Annin, M.D., Newark,
D. Reed, M.D.,
L. D. Dennis, M.D.,
Alex. Kirkpatrick, M.D., Burlington,
G. W. Bailey, M.D., Elizabeth,
} Censors.

THE HOMŒOPATHIC MEDICAL SOCIETY OF THE STATE OF PENNSYLVANIA.

M. Côtè, M.D., Pittsburg,
J. C. Burgher, M.D., Pittsburg,
J. C. Morgan, M.D., Philadelphia,
R. C. Smedley, M.D., West Chester,
J. E. James, M.D., Philadelphia,
} Delegates.

The Society held its second annual meeting at Harrisburg, May 12 and 13, 1868. The next will be at Wilkesbarre, May 18, 1869. The cause, as well as the Society, is in a flourishing condition; there being about four hundred practitioners in the State, of whom one hundred and twenty-five reside in Philadelphia, and about twenty in and near Pittsburg. There are ninety-seven active members of the Society, and the meetings are of constantly increasing interest.

In the State, there are, in the service of homœopathy, two colleges, two hospitals, five dispensaries, eight county societies, two medical journals, and three pharmacies. The Little Wanderers' Home, in Philadelphia, employs homœopathic treatment. All are prosperous. The Society requests the Institute to give its attention to the subject of the nomenclature of our materia medica, and also to the proper standard for the preparation of the homœopathic remedies.

The officers are:—

Coates Preston, M.D., Chester, President.
H. H. Hofmann, M.D., Pittsburg, 1st Vice-President.
J. J. Detwiler, M.D., Easton, 2d Vice-President.
B. W. James, M.D., Philadelphia, Recording Secretary.
R. J. McClatchey, M.D., Philadelphia, Corresponding Secretary.
W. M. Williamson, M.D., Philadelphia, Treasurer.

J. H. Marsden, M.D., York Sulphur Springs,
Richard Koch, M.D., Philadelphia,
O. B. Gause, M.D., Philadelphia, } Censors.

THE OHIO HOMŒOPATHIC MEDICAL SOCIETY.

E. B. Thomas, M.D., Delegate.

This Society was organized in 1864, and has held regular annual meetings since. Present number of members, one hundred and twenty-five, a few of whom are not graduates. The meetings are spirited, harmonious, and interesting.

The homœopathic organizations in the State are in a prosperous condition. There are several local or county societies; and, besides the institutions at Cleveland, there are dispensaries in successful operation at Cincinnati and Dayton, the last showing a vigorous infancy.

The officers of the Society are:—

W. Webster, M.D., Dayton, President.
F. L. Flowers, M.D., New Lexington,
A. Shephard, M.D., Glendale, } Vice-Presidents.
T. P. Wilson, M.D., Cleveland, Secretary.
C. C. White, M.D., Columbus, Treasurer.
Lewis Barnes, M.D., Delaware,
E. C. Beckwith, M.D., Zanesville,
J. B. Hunt, M.D., Columbus,
G. H. Blair, M.D., Cleveland,
J. Q. A. Coffeen, M.D., Dayton,
N. Schneider, M.D., Cleveland, } Censors.

THE MICHIGAN HOMŒOPATHIC INSTITUTE.

E. H. Drake, M.D.,
E. A. Lodge, M.D.,
W. J. Calvert, M.D.,
P. H. Hale, M.D., } Delegates.

The eighth annual meeting of this Society was held at Grand Rapids, May 19 and 20, 1868. The whole number of active members has been eighty-seven; the present number is sixty-seven. Three have died, and seventeen removed. Eleven new members were added this year.

The following is from the report of the Secretary, upon the subject of

HOMŒOPATHY IN THE MICHIGAN UNIVERSITY.

One of the first acts of the Institute after organizing in 1860 was to appoint a Committee of three to memorialize the Legislature relative to a homœopathic professorship in the State University at Ann Arbor; and this Committee, with additions to its number, has been continued from year to year.

The action of the Institute in appointing this Committee was prompted by the fact that in 1855, through the exertions of a few homœopathic physicians, a proviso had been added to the law enacted for the government of the University, as follows: "There shall be at least one professor of homœopathy in the medical department of the University at Ann Arbor," and the proviso never had been carried into effect by the Board of Regents.

As the Chair of Homœopathy still remained unfilled in 1866, it was decided at the regular meeting of the Institute of that year to petition the Supreme Court of the State for a *mandamus* to compel the Regents to comply with the law, and counsel was accordingly employed. The funds necessary to meet the expenses for this were raised by assessment on the members: but it was found that a *mandamus* could not, by law, be granted, unless the complaint was made by the Attorney-General, and this (for reasons best known to himself) he refused to do.

Failing in this, the only resort was to apply to the Legislature to refuse any aid to the University until the law had been obeyed; and at its next session, which was held during the winter of 1866–7, the following proviso to a bill granting aid to the University was passed, through the exertions of the Committee on the University and a few tried friends in the Legislature: "Provided that the Regents of the University shall carry into effect the law which provides that there shall always be at least one

professor of homœopathy in the department of medicine, and appoint said professor at the same salary as the other professors in this department; and that the State Treasurer shall not pay to the Treasurer of the Board of Regents any part or all of the above tax until the Regents shall have carried into effect this proviso."

The Regents were now forced to act, or be deprived of any aid from the Legislature. Accordingly, in the spring of the present year, they passed a resolution to establish a branch of the University at some other point in the State than Ann Arbor, to be called the Michigan School of Homœopathy, and appropriated three thousand dollars towards the erection of buildings; they also appointed Dr. Charles J. Hempel, Professor of Theory and Practice of Homœopathic Medicine, at a salary of one thousand dollars per annum, to be paid from that date, and also promised another professor, at an equal salary, to be appointed at the opening of the school. They then made a demand on the Auditor-General for his order on the Treasurer for the money voted by the Legislature, which he, after consulting with the Treasurer, refused, on the ground that the law had not been complied with.

An application was then made by them to the Supreme Court of the State, asking it to issue a peremptory *mandamus* to compel the Treasurer to pay over the money, which the court refused, and decided that the law demanded the appointment of a Professor of Homœopathy in the University at Ann Arbor.

At the meeting of the Institute of 1866, the subject of a separate school, which had at that time been suggested by the Regents, was duly canvassed, and the Institute was disposed to accept such a compromise; but, at the last regular meeting at Grand Rapids, the members were very generally opposed to a branch institution distant from Ann Arbor, particularly as the appropriation made by the Regents was ridiculously inadequate for the purpose.

It is now intended by the Regents to allow the matter to remain *in statu quo* until the Legislature meets next winter, when they will ask that body to grant the necessary funds, and give them power to establish a branch institution, with a full board of homœopathic professors; and it has been stated that they have expressed themselves willing to erect the branch on the University grounds at Ann Arbor, but separate from the allopathic school.

It is but justice to the Regents to say that their action has not been prompted by hostility to homœopathy. Most of the members of the present board are homœopathists in faith and practice, and their reason for evading the law has been their solicitude for the welfare of the University. They claim that the rival schools of medicine cannot exist side by side in the same building without a conflict which would be fatal to the welfare of the medical department, which has gained its present popularity by the exertions and under the care of the present professors, and that for that reason the allopathic school has the best right to the University.

On the other hand, it is claimed by us that, as the University is a State institution, supported by taxes levied on the allopathic and homœopathic public alike, it is unjust to force us to pay for a department in the University from which we receive no benefit, and which is inimical to our dearest interests. Nor is the objection of the Regents considered well founded. If the homœopathic professor is allowed to take the place in the medical department to which he is by law entitled, he will attack no one, but will simply teach the theory and practice of homœopathic medicine to the students, who will be enabled thereby, and by clinical experience, to judge of the merits or demerits of our system; and, if the allopathic doctrines suffer in consequence, it is the misfortune of allopathy, and not the fault of the homœopathic professor, or of his school of medicine.

The members of the Institute feel that they are fighting the

battle of the whole homœopathic profession. This University matter is not simply one of local interest but concerns every homœopathic physician in this country. We feel that our success is simply a question of time; and, whatever the action of the Legislature may be next winter, we do not intend to relinquish the struggle, but will agitate the question until we succeed.

J. D. CRAIG, *Secretary.*

The officers of the Institute are: —

C. A. Jefferies, M.D., Ann Arbor, President.
A. H. Botsford, M.D., Grand Rapids, Vice-President.
J. D. Craig, M.D., Niles, Secretary.
A. Bagley, M.D., Marshall, Treasurer.
C.J.Hempel,M.D., Grand Rapids,
Joseph Hooper, M.D., Corunna,
W. J. Calvert, M.D., Ann Arbor,
W. S. Whiting, M.D., Lansing,
A. J. Sawyer, M.D., Monroe,
} Censors.

THE HOMŒOPATHIC INSTITUTE OF THE STATE OF INDIANA.

O. P. Baer, M.D.,
Wm. Eggert, M.D.,
J. T. Boyd, M.D.,
} Delegates.

The second annual meeting was held in Indianapolis, May 13, 1868. The society is small in numbers, but is composed of good working material, and seems all alive to the work of elevating and advancing the standard of homœopathy in Indiana. It holds two meetings annually, in May and October; interesting papers are read and discussed, and important and difficult cases are reported for consideration.

The officers are: —

O. P. Baer, M.D., Richmond, President.
P. M. Leonard, M.D., Fort Wayne,
G. H. Stockham, M.D., Lafayette,
} Vice-Presidents.
N. G. Burnham, M.D., Indianapolis, Corresponding Secretary,
C. D. Jennings, M.D., Shelbyville, Recording Secretary.

William Eggert, M.D., Indianapolis,
J. T. Boyd, M.D., Indianapolis,
A. J. Compton, M.D., Muncie,
H. M. Waters, M.D., Peru,
T. H. Roberts, M.D., Wilmington,
} Censors.

THE ILLINOIS STATE HOMŒOPATHIC MEDICAL ASSOCIATION.

G. D. Beebe, M.D.,
D. S. Smith, M.D.,
R. Ludlam, M.D.,
J. S. Mitchell, M.D.,
G. S. Barrow, M.D.,
F. L. Vincent, M.D.,
L. E. Ober, M.D.,
} Delegates.

The fourteenth annual session of the society was held in Chicago, on May 19 and 20, 1868. About fifty members were present, and thirteen new members were added to the society. The meeting was one of the largest, as well as most interesting, which the Association has held, and much business of general interest was transacted. Reports were read upon the following subjects: —

Anatomy, by J. S. Mitchell, M.D., Chicago.
Clinical cases, by E. M. Hale, M.D., Chicago.
Surgical cases, by L. Pratt, M.D., Wheaton.
Sphygmograph, by R. Ludlam, M.D., Chicago.
Chloroform, by S. P. Hedges, M.D., Chicago.
Rights and Duties of Medical Men, by G. D. Beebe, M.D., Chicago.
Clinical cases, by N. F. Cooke, M.D., Chicago.
Cholera Prophylaxis, by A. E. Small, M.D., Chicago.
Clinical cases, by F. A. Lord, M.D., Chicago.
Anatomy of the Knee-joint, by S. B. Parsons, M.D., St. Louis, Mo.
Sympathetic relations of the Nervous System, by A. W. Woodward, M.D., Chicago.

The following are the officers for the ensuing year: —

G. D. Beebe, M.D., Chicago, President.
O. H. Mann, M.D., Waukegan,
W. D. McAffee, M.D., Rockford
} Vice-Presidents.
J. S. Mitchell, M.D., Chicago, Recording Secretary.
T. C. Duncan, M.D., Chicago, Corresponding Secretary.
L. Pratt, M.D., Wheaton, Treasurer.

F. H. Van Liew, M.D., Aurora,
J. Moore, M.D., Kankakee,
E. H. Kennedy, M.D., Argo,
H. B. Wright, M.D., Fairburgh,
J. C. Burbank, M.D., Polo,
} Censors.

2.—COUNTY AND LOCAL SOCIETIES.

CENTRAL HOMŒOPATHIC MEDICAL ASSOCIATION OF MAINE.

James M. Bell, M.D., Delegate.
N. G. H. Pulsifer, M.D., Waterville, President.
I. S. Hall, M.D., Hallowell, Secretary.

This Society, consisting of thirteen members, holds its sessions quarterly. Clinical reports, with discussions, and the everyday experience of the members, form the principal part of the proceedings. Physicians are thus brought together in a social manner; and, from personal relations, feel a deeper interest in each other's success.

BOSTON ACADEMY OF HOMŒOPATHIC MEDICINE.

L. D. Packard, M.D., Delegate.
H. C. Angell, M.D., Boston, President.
G. M. Pease, M.D., Boston, Secretary.

The Academy is in its tenth year, and, on the first of January, 1868, numbered sixty members, seven having been added during the previous year. Many of the members reside in the neighboring towns. Its meetings, held on the evenings of the second and fourth Mondays of each month, have had an average attendance of about twenty. Seven papers were prepared by members in the year past, and much valuable information was elicited by the discussions.

BRISTOL CO. (MASS.) HOMŒOPATHIC MEDICAL SOCIETY.

H. B. Clarke, M.D., Delegate.
George Barrows, M.D., Taunton, President.
J. W. Hayward, M.D., Taunton, Secretary.

This Society numbers twelve members, including three who

have not yet signed the by-laws. At every meeting, a paper or essay is presented upon some subject directly pertaining to homœopathy; each member is also required to report, from his own practice, at least one case in which symptoms, or groups of symptoms, have disappeared under the use of a single remedy.

WORCESTER CO. (MASS.) HOMŒOPATHIC MEDICAL SOCIETY.

L. B. Nichols, M.D., Delegate.
L. B. Nichols, M.D., Worcester, President.
C. C. Slocomb, M.D., Rutland, Secretary.

This Society was organized July 25, 1866. Its membership at this time is twelve, with more about to join. The meetings are quarterly. They are well attended, spirited, and profitable.

CENTRAL NEW YORK HOMŒOPATHIC MEDICAL SOCIETY.

C. W. Boyce, M.D., Delegate.
W. H. Hoyt, M.D., President.
C. W. Boyce, M.D., Auburn, Secretary.

Eleven counties are covered by the field of this Society, which now numbers forty members. It has held four meetings in the year; about thirty papers have been read, and twenty of them published. Twenty-five cases of treatment have been verbally reported. One medicine has been proved by about twenty members with singularly uniform results.

DUTCHESS CO. (N.Y.) HOMŒOPATHIC MEDICAL SOCIETY.

Henry N. Avery, M.D., Delegate.
I. S. P. Lord, M.D., Poughkeepsie, President.
J. Hornby, M.D., Poughkeepsie, Secretary.

This Society was organized in 1861. Five of its members have since removed, and three died; viz.,

F. Vanderburg, M.D., Rhinebeck; J. F. Merritt, M.D., Pleasant Plains; M. J. Whiton, M.D., Fishkill.

Notwithstanding these severe losses, this Society still maintains a prosperous condition.

DUTCHESS CO. (N.Y.) HOMŒOPATHIC MEDICAL SOCIETY'S MUTUAL IMPROVEMENT ASSOCIATION.

H. N. Avery, M.D., Delegate.

The members meet once a month, for the purpose of reading papers, debating important subjects, etc.

ERIE CO. (N.Y.) HOMŒOPATHIC MEDICAL SOCIETY.

L. M. Kenyon, M.D., Delegate.
H. C. Blanchard, M.D., Buffalo, President.
E. G. Cook, M.D., Buffalo, Secretary.

Society organized November, 1859. It has now fifteen active members, and holds regular annual and quarterly meetings, together with monthly and special meetings for discussion.

KING'S CO. (N.Y.) HOMŒOPATHIC MEDICAL SOCIETY.

J. L. Keep, M.D., Delegate.
Henry Minton, M.D., Brooklyn, President.
B. Fincke, M.D., Brooklyn, Secretary.

Organized November 12, 1857, with twenty-nine members. It has held its meetings regularly ever since. Besides annual and semi-annual meetings on the second Tuesdays of May and November, there are meetings on alternate Tuesdays, except in summer. The society is in good working order, with twenty-four active members. Under the presidency of A. C. Burke, M.D., clinical cases were brought into the meetings for examination and discussion. This novel feature proved very interesting and profitable.

HOMŒOPATHIC MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

G. E. Belcher, M.D., Delegate.
Robert McMurray, M.D., New York, President.
H. M. Smith, M.D., New York, Secretary.

Organized, by special act of Legislature, on November 11, 1857. It holds monthly meetings.

ULSTER CO. (N.Y.) HOMŒOPATHIC MEDICAL SOCIETY.

F. W. Ingalls, M.D., Delegate.
Levi Shaffer, M.D., Kingston, President.
Everitt Hasbrouck, M.D., Modena, Secretary.

This Society was organized May 10, 1865.

EASTERN NEW JERSEY HOMŒOPATHIC MEDICAL SOCIETY.

S. B. Tompkins, M.D., Delegate.
E. C. Webb, M.D., Orange, President.
S. B. Tompkins, M.D., Newark, Secretary.

Society organized February 6, 1868. It has thirteen members. It meets monthly, and the members are required, in alphabetical order, to read papers, which are referred to one of four standing committees.

HOMŒOPATHIC MEDICAL SOCIETY OF ALLEGHENY CO., PA.

J. C. Burgher, M.D., Delegate.
D. Cowley, M.D., Pittsburg, President.
J. H. McClelland, M.D., Pittsburg, Secretary.

Organized December 2, 1864. It now numbers twenty active members, and four associates, — medical students. It holds interesting and profitable meetings at the hospital in Pittsburg on the second Friday of each month.

HOMŒOPATHIC MEDICAL SOCIETY OF CHESTER AND DELAWARE COS.

R. C. Smedley, M.D., Delegate.
I. D. Johnson, M.D., Kennett Square, President.
J. E. Jones, M.D., West Chester, Secretary.

The Society meets quarterly instead of semi-annually, as heretofore. There are twelve members within the district, and

some attend the meetings who reside in other districts. Quite a number of physicians who have recently adopted the homœopathic practice, or have lately moved into the district, have not yet become members. Last year the society proved Hydrastis canadensis, and published some tracts for gratuitous distribution. The cause is steadily gaining.

CUMBERLAND VALLEY (PA.) HOMŒOPATHIC MEDICAL SOCIETY.

J. H. Marsden, M.D., Delegate.
J. H. Marsden, M.D., York Sulphur Springs, President.
W. H. Cook, M.D., Carlisle, Secretary.

The Society numbers twelve active members. None of its semi-annual meetings pass without one or more good papers. It has done much to promote friendship among its members, and to advance the cause of homœopathy.

HOMŒOPATHIC MEDICAL SOCIETY OF PHILADELPHIA CO. PA.

J. E. James, M.D., Delegate.
Richard Gardiner, M.D., Philadelphia, President.
R. J. McClatchey, M.D., Philadelphia, Secretary.

The prosperity and growth reported last year still continue.

CINCINNATI HOMŒOPATHIC MEDICAL SOCIETY.

J. H. Pulte, M.D., Delegate.
C. C. Bronson, M.D., Cincinnati, President.
G. W. Bigler, M.D., Cincinnati, Secretary.

Organized in 1862; but, in consequence of various adverse, opposing influences, it had but a brief active existence. It was re-organized May 6, 1867, and has had a very successful year. Its members, twenty-four in number, meet on the first Monday of every month, prepared to discuss a topic announced at the meeting before. A monthly journal — the *American Homœopathist* — and a free dispensary are the fruits of this organization.

In October last, the Society lost by death Dr. A. Bauer, one of the earliest and ablest practitioners of homœopathy in Cincinnati.

CUYAHOGA CO. (O.) HOMŒOPATHIC MEDICAL ASSOCIATION.

J. P. Dake, M.D., Delegate.
D. H. Beckwith, M.D., Cleveland, President.
G. W. Barnes, M.D., Cleveland, Secretary.

Organized in May, 1865. It has since failed of but four of its regular monthly meetings. The *Ohio Medical and Surgical Reporter* has published the more interesting of its papers. The meetings have been conducive to good fellowship, as well as good practice.

HAHNEMANNIAN SOCIETY OF CLEVELAND HOMŒOPATHIC COLLEGE.

H. H. Baxter, M.D., Delegate.
T. P. Wilson, M.D., President.
H. H. Baxter, M.D., Secretary.

This Society has been incorporated within the past year, and has enjoyed a course of lectures from eminent physicians, residents of Cleveland, and others. It anticipates a brilliant and useful future.

HOMŒOPATHIC SOCIETY OF THE SEVENTEENTH CONGRESSIONAL DISTRICT OF THE STATE OF OHIO.

R. B. Rush, M.D., Delegate.
R. B. Rush, M.D., Salem, President.
S. C. Shane, M.D., Steubenville, Secretary.

The Society has thirteen members. Its semi-annual meetings have been rendered profitable by papers of more than usual interest, and instructive clinical cases. The cause is gaining within its bounds.

COOK CO. (ILL.) HOMŒOPATHIC MEDICAL SOCIETY.

R. Ludlam, M.D., Delegate.
R. Ludlam, M.D., Chicago, President.
T. C. Duncan, M.D., Chicago, Secretary.

This Society was established in 1857. It now numbers some forty members, who meet every other week. Each member is a permanent committee upon some medical topic; and these committees report in regular rotation at each meeting of the Society.

ST. LOUIS HOMŒOPATHIC MEDICAL SOCIETY.

J. T. Temple, M.D., Delegate.
J. T. Temple, M.D., St. Louis, President.
N. D. Tirrell, M.D., St. Louis, Secretary.

The Society numbers fourteen members. Its meetings have been unusually interesting, and are fully attended and harmonious.

8.—HOSPITALS, INFIRMARIES, ETC.

CONSUMPTIVES' HOME, BOSTON.

Charles Cullis, M.D., Delegate.
Charles Cullis, M.D., Boston, Founder.

The operations of the Home have steadily increased in extent and beneficence. During the second year, ending Sept. 30, 1867, eighty-one persons enjoyed the benefits of the Home; twenty-three were discharged by being provided for by friends, or from other causes; fifteen, as able to labor; one, cured; twenty-nine died, and thirteen remained at the close of the year. The whole number of inmates had then been one hundred seventy-nine. The houses are Nos. 11, 13, and 18 Willard Street; the latter having been established within the year as a home for the children of the inmates; and of these, such as are left orphans will be provided for until maturity.

HOUSE OF THE ANGEL GUARDIAN, BOSTON.

H. P. Shattuck, M.D., Delegate.
Rev. G. F. Haskins, Superintendent.
H. P. Shattuck, M.D., Boston, Physician.

There have been between three hundred and three hundred and fifty boys in this institution all the time during the past year. In that time they have been remarkably healthy. There

has been no epidemic of any kind, and but few of the complaints common to children of their ages.

The "new-school" treatment continues to give the utmost satisfaction to the managers of the institution.

The accompanying table shows the number of cases treated, with the results thereof. One remarkable case is that of a boy who came to this institution under the supposition that he could live but a short time from tubercular phthisis. At the present time he is, to all appearances, well, and remarkable for his excessive muscular power.

One case has died this year, of heart disease of rheumatic origin. On making an autopsy, considerable hypertrophy was found; the pericardium was adherent throughout its entire surface, and all the valves were covered with ossific nodules. There was also dropsy of the abdomen and thorax.

Disease.	No. Cases.	Cured.	Relieved.	Died.	Received Treatm'nt.	Remarks.
Abscess	2	2				
Bronchitis	2	2				
Carditis	1	....	....	1	....	See autopsy.
Cephalalgia	5	5				
Crusta lactea	1	1				
Conjunctivitis	3	3				
Constipation	1	1				
Diarrhœa	2	2				
Dysentery	1	1				
Erysipelas	1	1				
Furunculus	6	6				
Herpes	1	1				
Laryngitis	2	2				
Measles	1	1				
Ophthalmia	5	4	....	....	1	
Paraphymosis	1	1	....	....	....	By operation.
Pneumonia	2	2				
Phthisis	2	1	....	....	1	
Psoriasis	2	1	....	....	1	
Rheumatism	5	5				
Typhoid Fever	3	2	....	....	1	
Intermittent Fever	2	2				
Scrofula	6	2	2	....	2	
Tumor (on face)	1	1	....	....	....	By operation.
Tracheitis	1	1				
Total	58	49	2	1	6	

FIVE POINTS HOUSE OF INDUSTRY, NEW YORK.

B. F. Joslin, M.D., Delegate.
Rev. S. B. Halliday, Superintendent.
B. F. Joslin, M.D., Attending Physician.
Henry C. Houghton, M.D., Resident Physician.

The total number of inmates for the year was 1,289; 224 remaining at the close. The following is a tabular statement of diseases and deaths for the year ending March 1, 1868.

TABULAR STATEMENT.

Name of Diseases.	No. of Cases Occurred.	Sent to Hospital.	Treated at House.	Died.	Name of Diseases.	No. of Cases Occurred.	Sent to Hospital.	Treated at House.	Died.
Typhus	2	..	2	..	Odontalgia	9	..	9	..
Typhoid Fever	6	..	6	..	Extraction of Teeth	6	..	6	..
Intermittent Fever	8	..	8	..	Parotitis	1	..	1	..
Ephemeral Fever	21	..	21	..	Cancrum Oris	2	..	2	..
Erysipelas	2	..	2	..	Gangrene of the Mouth	1	..	1	..
Varicella	1	..	1	..	Sore Throat	54	..	54	..
Scarlatina	8	..	8	..	Diphtheria	1	..	1	..
Measles	20	..	20	..	Cough	11	..	11	..
Urticaria	1	..	1	..	Bronchitis	83	..	83	..
Eruptions in general	82	..	82	..	Bronchitis, Chronic	1	..	1	..
Furunculus	17	..	17	..	Whooping Cough	9	..	9	..
Abscesses	8	..	8	..	Pneumonia	5	..	5	..
Ulcers	9	..	9	..	Typhoid Pneumonia	1	..	1	1
Injuries	40	..	40	..	Pleurisy	5	..	5	..
Dropsy	1	..	1	..	Pleurodynia	1	..	1	..
Œdema	1	..	1	..	Phthisis	5	..	5	3
Scrofula	8	..	8	..	Heart Disease	3	..	3	..
Enlarged Glands	9	..	9	..	Gastric Derangement	36	..	36	..
Morbus Coxarius	3	..	3	1	Gastralgia	5	..	5	..
Periostitis	4	..	4	..	Dyspepsia	9	..	9	..
Paronychia	17	..	17	1	Diarrhœa	108	..	108	..
Alcoholism	3	..	3	..	Dysentery	8	..	8	..
Rheumatism	21	..	21	..	Cholera morbus	1	..	1	..
Prostration	3	..	3	1	Colic	4	..	4	..
Venereal	1	.1	..	..	Hepatitis	4	..	4	..
Cephalalgia	50	..	50	..	Prolapsus Ani	8	..	8	..
Convulsions	2	..	2	..	Helminthiasis	4	..	4	..
Night Sweats	1	..	1	..	Constipation	21	..	21	..
Wry-neck	1	..	1	..	Bright's Disease	1	..	1	1
Neuralgia	6	..	6	..	Acute Hydrocephalus	1	..	1	1
Ophthalmia	129	.1	128	..	Dysmenorrhœa	3	..	3	..
Hordeolum	5	..	5	..	Amenorrhœa	7	..	7	..
Inflam. of Lachrymal Sac.	1	..	1	..	Leucorrhœa	1	..	1	..
Coryza	1	..	1	..	Eneuresis	2	..	2	..
Deafness	1	..	1	..	Peritonitis	1	.1	..	..
Otorrhœa and Otalgia	17	..	17	..	Parturition	1	.1	..	..
Dentition	1	..	1	..	Sciatica	1	..	1	..
						935	4	931	8

RECAPITULATION, 1867-68.

Total number of Cases	935
Sent to Hospital	4
Treated at the House	931
Died at the House	8
Prescriptions	2,374
Visits by Dr. Joslin	64
Vaccinated	428

The success attending the homœopathic treatment has been very gratifiying, the mortality having been less than nine-tenths of one per cent. The fatal cases were three of consumption, one of hip disease, one of Bright's disease, one of acute hydrocephalus, one of general debility, one of typhoid pneumonia. The first six were of a scrofulous character.

Scarlet fever twice started in the House, but on each occasion Belladonna was given as a preventive, not only to the children more directly exposed in the hospital-room, but to all the children in the institution. The result was most satisfactory, as, in all, only eight cases of this dreaded disease occurred: these were treated successfully.

One case of gangrene of the mouth was cured; in a former year, two cases were reported cured by homœopathic remedies, — a pleasant success with a disease so generally fatal.

The present hospital-room, though admirable in some respects, is quite insufficient to properly accommodate all the demands made upon us by the sick children. The very serious evil of having to treat *all* diseases, contagious or otherwise, in *one room*, is too apparent to require comment. Scrofulous ophthalmia will always be found among this class of children, and is readily communicated from one to another. Typhus, scarlet fever, and measles occasionally visit them.

Apart from the contagious character of these diseases, another very important reason for separation in different wards is found in the very different kind of care required. Ophthalmia and typhus require a constant supply of pure air of a moderate temperature; the poisonous emanations are thus rendered harmless by being diluted with plenty of air. Scarlet fever and measles, though of course requiring good ventilation, cannot with impunity be exposed to the strong draughts of air found useful with the other diseases named.

It is to be hoped that, at some time not too far in the future

several fine wards may be provided, with the much-needed conveniences of baths, and cooking apparatus for hospital purposes.

NEW YORK HOMŒOPATHIC HOSPITAL.

H. M. Smith, M.D., Delegate.

The Hospital was chartered April, 1867. It is to be, like other similar institutions, under the superintendence of the Commissioners of Public Charities and Corrections of the City, but all the patients are to "be under the care of surgeons and physicians belonging to the homœopathic school of medicine." The last Legislature removed some obstacles to putting the institution into working order, and that consummation is, we trust, not far off.

NEW YORK OPHTHALMIC HOSPITAL.

T. F. Allen, M.D., Delegate.
C. F. Liebold, M.D., J. M. Wetmore, M.D., } Attending
T. F. Allen, M.D., C. A. Bacon, M.D., } Surgeons.

The Trustees of this institution, in the middle of its sixteenth year, voted, on the evening of June 10, 1867, to replace the allopathic staff with a homœopathic one. This change was very suddenly brought about by the mutual discovery, among the Trustees, that fifteen out of seventeen of them were homœopaths. Suitable surgeons were quietly looked up, and the change was made without the knowledge of most of the homœopathic physicians, and without any influence exerted by them on the Trustees. The two allopathic Trustees resigned, and homœopaths were chosen in their places. The change is attracting a new class of patients, who are dissatisfied with the harsh treatment of allopathy.

During the remainder of the year 1867, after the change of treatment, the number of patients was 702; in the former part of the year there had been 504,—making a total of 1,226. The operations of the latter part of the year were thirty-nine,

performed upon twenty-seven patients; all were followed by good results. The smallness of the number of operations was due to care in the selection of cases, and the postponement of operations to cooler weather. Two of the surgeons attend daily; on alternate days, all are present. An Ophthalmic School is connected with the Hospital, with two evening lectures a week. There is a clinic four days in the week.

PROTESTANT HALF ORPHAN ASYLUM, NEW YORK.

B. F. Bowers, M.D., Delegate.
B. F. Bowers, M.D., New York, Physician.

This institution, now in its thirty-third year, was placed under homœopathic care, under very trying circumstances and as an experiment merely, in 1842, a quarter-century since. The experiment has been carried far enough to determine the result, comparing the eight years of allopathy with the twenty-five years of homœopathy.

The average annual results, together with a statement of the fatal cases, under homœopathic treatment, appear in the following table: —

	1835 to 1842.	1842 to 1852.	1852 to 1862.	1862 to 1867.	Total Deaths in 25 yr.
Average No. of Inmates	106	184	232	220	
Total No. of Cases	1,063	2,543	3,202	1,554	
The fatal cases were, from: —					
Asiatic Cholera	.....	10	.....	.....	10
Typhus	.....	4	5	.....	9
Scarlet Fever	.....	1	4	.....	5
Convulsions	.....	2	2	1	5
Consumption	.....	2	2	.....	4
Marasmus	.....	.....	3	.....	3
Congestion of the Brain	.....	.....	1	1	2
Organic disease of the Heart	.....	1	.....	1	2
Pneumonia	.....	.....	1	1	2
Typhoid Fever	.....	.....	.....	1	1
Inflammation of the Brain	.....	1	.....	.....	1
Dysentery	.....	.....	1	.....	1
Gangrene of the Mouth	.....	.....	1	.....	1
Purpura hæmorrhagica	.....	.....	.....	1	1
Deaths	22	21	20	6	47
Proportion of Deaths	1:58	1:121	1:160.1	1:259	1:155

Thus the average mortality in this Asylum under allopathic treatment — seven years — was *two per cent;* under homœopathic treatment, — twenty-five years, — a little over *six-tenths of one per cent.* Such a record not only indicates the superiority of homœopathy, but also the steady improvement and more satisfactory results in each succeeding decade. It effectually silences the complaints made in some quarters that the practice of homœopathy is retrograding.

ORPHAN ASYLUM, NEWARK, N.J.

S. B. Tompkins, M.D., Delegate.
S. B. Tompkins, M.D., Physician.

THE LITTLE WANDERERS' HOME, PHILADELPHIA.

H. N. Martin, M.D., Delegate.
H. N. Martin, M.D., Attending Physician.

This institution is located at the corner of Tenth and Shippen Streets. During the past year, there have been several cases of scarlet fever, measles, and whooping-cough, a great number of cases of ophthalmia, and of various skin diseases. Only one death — from scarlet fever — has occurred during the year.

HOSPITAL OF THE HOMŒOPATHIC MEDICAL COLLEGE OF PENNSYLVANIA.

H. N. Guernsey, M.D., Delegate.

An attempt is being made to raise from half a million to a million dollars for this object. The Trustees have issued circulars, and have received many encouraging replies. A hospital of from two hundred to four hundred beds is proposed; it would be a great advantage to the students, as well as a boon to the sick poor.

HOMŒOPATHIC HOSPITAL AND DISPENSARY OF PITTSBURG.

M. Côté, M.D., Delegate.
D. Cowley, M.D.,
L. M. Rousseau, M.D.,
M. D. Taudte, M.D.,
J. E. Barnaby, M.D.,
} Medical Staff.
J. C. Burgher, M.D.,
L. H. Willard, M.D.,
J. H. McClelland, M.D.,
Walter Ure, M.D.,
} Surgical Staff.
D. Cowley, M.D., Obstetrician.
H. H. Hofmann, M.D., Consulting Physician.

This institution is now placed on a firm financial basis. Its property is estimated at about $45,000. The receipts for the last year were $30,140.64. The building is in complete repair, and will accommodate thirty-eight patients, with their attendants. It has an earnest and efficient Medical Board. The Ladies' Homœopathic Charitable Association, connected with it, now numbers about two hundred members, and has, in the last two years, applied more than ten thousand dollars to the maintenance of poor patients; this sum, with that received from other patients, almost covers the expenses. The number of patients treated in the twenty months of its existence has been 256, with a mortality of 17, — a little less than seven per cent. The number of patients in 1867 was 162.

The Dispensary is the oldest in this part of the State. It has done much to advance homœopathy. The number of prescriptions in the last year was 1,724; in the whole time, 2,504.

CLEVELAND HOMŒOPATHIC HOSPITAL.

T. P. Wilson, M.D., Delegate.

A few enterprising individuals have purchased a large, beautiful, well-located building for thirty-five thousand dollars, and given the use of it to the Homœopathic Hospital Association for ten years, with liberty to purchase. It is hoped that the institu-

tion will commence its career of mercy in the course of July, 1868. The Cleveland Homœopathic College shares in the use of the building.

4. — DISPENSARIES.

CONSUMPTIVES' HOME DISPENSARY, BOSTON.

G. M. Pease, M.D., Delegate.
G. M. Pease, M.D., Attending Physician.

This was opened at the Consumptives' Home, No. 13 Willard Street, Boston, March 27, 1868. In two months about sixty different cases have been treated. A large proportion was of pulmonary affections, there being a prevailing idea that the Dispensary is especially designed for consumptives. The institution is without endowment, and dependent on voluntary contributions. The conveniences of the room are limited, and it is open from one to two, P.M., only; but it is hoped that its usefulness and facilities will increase as the work advances.

HOMŒOPATHIC MEDICAL DISPENSARY, BOSTON.

George Russell, M.D., Delegate.
S. Whitney, M.D., Attending Physician.
A. F. Squier, M.D., } Visiting Physicians.
A. Boothby, M.D., }

The plan of the Dispensary has not been changed since the last report, with the exception of the appointment of Visiting Physicians. By this means a large number of patients are cared for who are not able to come to the rooms.

The number of prescriptions has been greater than in any preceding year, and the results have been still more satisfactory. The funds of the Dispensary have increased in amount, and it is hoped they will eventnally form the nucleus for a hospital.

BOND-STREET HOMŒOPATHIC DISPENSARY, NEW YORK..

Otto Füllgraff, M.D., Delegate.
C. E. Campbell, M.D., Resident Surgeon.
J. P. Ermentraut, M.D., Attendant at Eastern Branch.

This institution has been in operation at No. 59 Bond Street for thirteen years. It has now a branch office at 197 East Seventh Street. The clinic for the eye is under the care of Dr. C. T. Liebold, a pupil of the celebrated Baron von Graefe, of Berlin. Special attention is given to nasal catarrh and diseases of the throat, acute and chronic. The success has been positive, and, in many cases, even remarkable. Physicians are invited to examine the modes of operating and the instruments used. The steady growth in the number of patients is seen from the following table: —

Year.	Cases attended at Dispensary.	Out-door Visits.	Presc'ptions given.
Year ending Jan. 31, 1856	521	.....	1,895
" " 1857	1,024	.....	4,023
" " 1858	1,808	.....	7,436
" " 1859	2,077	.....	8,276
" " 1860	2,195	.....	8,301
" " 1861	3,018	.....	9,132
" " 1862	5,130	.....	13,660
" " 1863	8,159	4,200	24,389
" " 1864	14,195	7,425	35,387
" " 1865	17,106	8,067	42,765
" " 1866	24,086	8,123	46,160
" " 1867	25,056	8,245	48,036
" " 1868	26,046	8,325	50,122
Total for thirteen years	130,421	44,385	299,582

The results in the several forms of disease in the past year were as follows: —

Form of Diseases.	No. of Cases.	Cured.	Relieved.	Result Unknown.	Died.
Accouchments	93	93	.....	.....	....
Angina faucium, Tonsilitis and Laryngitis	1,827	1,607	96	124	....
Asthma	145	73	52	20	....
Bronchitis, acute and chronic	371	231	82	49	9
Cancrum oris	661	550	.....	111	....
Catarrhus nasalis	642	495	89	58	....
Cephalalgia	1,012	806	184	22	....
Chlorosis	230	146	54	30	....
Cholera infantum	17$_{2}$	100	.....	58	14
Cholera morbus	32^{2}	266	.....	60	....
Colic	25^{6}	207	.....	45	....
Constipation	2,24^{2}	1,673	325	244	....
Contusions and Sprains	1,22^{2}	1,084	.....	143	....
Croup, spasmodic and membranous	7^{7}	62	.....	10	3
Diarrhœa	2,45^{5}	2,351	.....	102	....
Digestion, Derangement of	1,12^{3}	862	118	142	....
Diphtheria	4^{2}	35	.....	11	3
Dysentery	33^{9}	301	.....	35	2
Erysipelas	10^{8}	102	.....	.....	....
Eye and its appendages	68^{2}	498	103	85	....
Fever, scarlet, intermittent, cont'd & typhoid	42^{6}	360	.....	60	6
Gonorrhœa—syphilis, primary and secondary	29^{6}	243	.....	52	....
Hæmorrhoids	18^{5}	80	82	19	....
Hepatitis, acute and chronic	51	32	8	11	....
Hydrocephalus	14	7	.....	2	5
Influenza	972	810	.....	162	....
Measles	117	117	.....	.....	....
Neuralgia of face and other parts	585	465	81	39	....
Phthisis	24	.....	10	11	3
Pleurisy, acute and chronic	94	68	19	6	1
Pneumonia	137	134	.....	.....	3
Rheumatism, acute and chronic	1,561	1,076	355	130	....
Spermatorrhœa	45	30	6	9	....
Skin, Diseases of the	1,255	1,020	.....	235	....
Surgery in all forms, including dental	3,680	3,680	.....	.....	....
Vaccination	725	725	.....	.....	....
Whooping-cough	398	288	.....	107	3
Womb (uterine diseases generally)	1,062	660	301	101	....
Worms	399	305	.....	94	....
Number of cases	26,046	21,642	1,965	2,387	52

Total number of prescriptions.....50,122
Including out-door visits 8,325

NEW YORK HOMŒOPATHIC DISPENSARY.

R. McMurray, M.D., Delegate.
John S. Linsley, M.D., House Physician.

The success of this institution, as regards the amount of good accomplished, has been great, and is constantly increasing.

The following is the classification of cases treated during the year 1867: —

Diseases of Women and Children	2,339
" Head and Abdomen	2,270
" Chest and Throat	1,747
" Skin	691
" Eye and Ear	327
Surgical Department	1,764
Vaccinations	572
Whole number of cases treated in the Visiting Department, and not included in above classification	1,363
Total	11,073
Total number of deaths	43
Sent to Hospitals	109

It is believed that no similar institution in the world can show more success as regards the saving of life, or greater results as regards the treatment of a large number of sick, for so small an amount of money. Of the 43 deaths out of the 11,073 patients, nearly every one was from some illness incurable from its very nature. The actual cost of treating 11,073 patients last year, and supplying them with medicines, did not exceed $3,200! This of course included *every* item, — rent, printing, etc., etc.

The Dispensary is open from 10, A.M., to 4, P.M., daily, except on Sundays, when it is open from 1 to 2, P.M.

BROOKLYN HOMŒOPATHIC DISPENSARY.

J. Lester Keep, M.D., Delegate.
A. E. Sumner, M.D., Medical Director.
C. T. Hamilton, M.D., House Physician.
Melville Bryant, M.D., Surgeon.

This institution, which was incorporated in 1852, has, during the past few years, been rapidly increasing in usefulness and prosperity, until it now ranks as the foremost among the out-door charities of the city of Brooklyn.

Its pecuniary condition is highly satisfactory. It owns its building and its appurtenances; is entirely free from debt, and has an assured income sufficient for its support. The entire building is devoted to its use: it contains separate suits of rooms for each department, including a Pharmacy, Library, and Reading-room. The Surgical Department is replete with every convenience, including complete sets of instruments, etc.

During the year ending May 1, 1868, the number of prescriptions was 27,523, and the number of patients 9,145; the number of patients being upwards of 3,000 more than that of the oldest and most important allopathic dispensary in the city.

GATES AVENUE HOMŒOPATHIC DISPENSARY.

J. Lester Keep, M.D., Delegate.
J. Lester Keep, M.D., Physician in Charge.
S. H. Keep, M.D., House Physician.

This institution was incorporated in February, 1867; and, notwithstanding very many embarrassments, has eclipsed all of its predecessors in the amount of business done the first year. It is now under the direction of a Board of Trustees, residents of that part of the city, and the prospects for the future are quite encouraging. During the fifteen and a half months ending May 1, 1868, the number of prescriptions dispensed was 5,124, and 2,477 patients received treatment.

BUFFALO HOMŒOPATHIC DISPENSARY.

L. M. Kenyon, M.D., Delegate.

This institution was opened Nov. 1, 1867. In the first eight months of its operation, about eleven hundred prescriptions were made; these were generously dispensed by C. S. Halsey's pharmacy at a very small charge for each. Thirteen of our physicians share its responsibilities, and the cases treated have mostly done well. The Dispensary is in a very prosperous condition.

POUGHKEEPSIE, (N.Y.) HOMŒOPATHIC MEDICAL AND SURGICAL DISPENSARY.

H. N. Avery, M.D., Delegate.

Levi Hubbard, M.D., } Attending Physicians
H. N. Avery, M.D., } and Surgeons.

This institution was founded Nov. 20, 1865, and in two years treated 1,582 cases. More than three hundred were cases of intermittent fever; they have been treated with the most gratifying results. With the exception of a few cases, cures have been effected without the aid of quinine. The total number of cases treated the second year was 724: of these 612 were cured; 49 relieved; 3 died; 57 were still under treatment; and of 3 the result was unknown. The number of cases of intermittent fever treated this year was but 71, — 64 of these were cured, 1 relieved, and 6 still under treatment. But for the better health of the city this year, and particularly the less amount of intermittent fever, the results of the second year would compare still more favorably with the first. At the retirement of Dr. Hofmann, many for a while, supposed the Dispensary closed, and sought relief elsewhere. The total receipts of the year were $316; expenses, $228.13, — leaving $87.87 in the treasury.

NEWARK (N.J.) HOMŒOPATHIC DISPENSARY.

J. J. Youlin, M.D., Delegate.

F. B. Mandeville, M.D.,
D. G. Drums, M.D.,
F. A. Rockwith, M.D.,
S. B. Tompkins, M.D.,
} Attending Physicians.

During the past year, 1,500 prescriptions were made for 450 callers and 400 out-patients. The fatal cases were five, — from convulsions, two; phthisis, two; and one from typhoid fever.

DISPENSARY OF THE HOMŒOPATHIC MEDICAL COLLEGE OF PENNSYLVANIA.

H. N. Guernsey, M.D., Delegate.

This Dispensary is attached to the College, and is located in the College Building, Filbert Street, above Eleventh, Philadelphia. It is visited daily by a large number of the intelligent poor of the city, seeking relief for their ailments from the gentle force of homœopathy.

Nearly twenty thousand prescriptions were dispensed during the past year.

The use of the ophthalmoscope, laryngoscope, and kindred diagnostic appliances, is fully taught by Prof. Macfarlan. It is proposed to organize also, in connection with this Dispensary, a lying-in charity and nurse's home, for the proper education of women to act in the capacity of nurses in sick-rooms under homœopathic care.

EYE AND EAR INFIRMARY OF THE HOMŒOPATHIC COLLEGE OF PENNSYLVANIA.

M. Macfarlan, M.D., Delegate.
M. Macfarlan, M.D., Physician.

This charity is an adjunct to the General Infirmary connected with the College. It occupies a room on the ground-floor of the

College, expressly fitted up with all the instruments and appliances necessary to the successful working of this department.

It has been established but a few weeks, and now treats daily some six or eight cases; the number is steadily increasing.

THE HAHNEMANN MEDICAL COLLEGE DISPENSARY, PHILADELPHIA.

John C. Morgan, M.D., Delegate.
W. J. Earhardt, M.D., Chief Dispensing Physician.

This Dispensary is in a flourishing condition. Medicines have been dispensed during the past year to nearly 9,000 patients.

Connected with the Dispensary is an obstetrical department, patients of which are attended free of charge.

This institution affords abundant material for clinical experience — obstetrical, surgical, and medical — to the students of the Hahnemann Medical College.

WASHINGTON (D.C.) HOMŒOPATHIC DISPENSARY.

T. S. Verdi, M.D., Delegate.
T. S. Verdi, M.D., Director.

The Dispensary was established in 1866, to supply the urgent necessity of those sufferers who could not apply to physicians or buy medicines, for want of means; and it has proved very successful. In the course of one year, eight hundred people have applied for and received relief.

The Dispensary has been kept open three hours a day; the patients have also been visited at their homes. This charity was at first sustained by voluntary contributions; but, this year, Congress, recognizing its importance, has voted five hundred dollars in aid of it. It has set a good example to the physicians of the old school, who, not wishing to be outdone, have opened dispensaries of their own. A register is kept of the patients, diseases, and prescriptions; it is open to any person desiring to inspect it. Gentlemen of the highest respectability have shown their confidence in this institution by becoming guardians to the Dispensary.

HAHNEMANN MEDICAL COLLEGE DISPENSARY, CHICAGO.

R. Ludlam, M.D., Delegate.
J. W. Streeter, M.D., Attending Physician.

This charity was organized in 1858. Its rooms are in the College Building. It is supported by the College, and by private donations. It is open daily to out-patients at 11.30, A.M. Every variety of disease receives treatment; and the material thus afforded is the basis for the College clinics, of which three are held weekly during the lecture season: —

On Surgery, by Prof. Beebe;
On Practice, by Prof. Cooke;
On Diseases of Women and Children, by Prof. Ludlam.

WEST DIVISION HOMŒOPATHIC DISPENSARY OF CHICAGO.

T. C. Duncan, M.D., Delegate.
L. H. Holbrook, M.D., Attending Physician.

This charity was organized Jan. 4, 1868, and was opened for patients at No. 240 West Madison Street, Jan. 20, 1868. The association is composed of the originators, and others annually contributing five dollars or more to its treasury. Ten dollars constitutes a life-member.

The total number of cases already treated is 139; the number of out-patients, 35. The whole number of prescriptions, 230.

There has been but one death.

The Dispensary has not been in operation a sufficient length of time to acquire much clinical experience of value. Sufficient facts, however, have been obtained to show the superiority of the great "law of cure" over empiricism.

The greatest number of cases treated have been diseases incident to the changeable weather of our spring months, and mostly of a mild type. The cases of bronchitis number some thirty. The remedies mostly indicated have been Acon., Ars., Bry., Hepar

sulph., ranging from 3d to 30th cent. attenuation. Results in these cases were highly satisfactory.

The highest number of prescriptions in any one case was nine; one or two prescriptions being sufficient in most cases.

SAINT LOUIS HOMŒOPATHIC DISPENSARY.

E. C. Franklin, M.D., Delegate.

This Dispensary is located in the College Building, No. 1,009 Locust Street. It furnishes medical and surgical advice and attendance from the best homœopathic physicians and surgeons in the city, and provides medicine, free of charge, for the poor; while those unable to attend in person are treated at their residences.

The Dispensary is well sustained by the charitable people of St. Louis. Daily clinics are held, and earnest efforts are made to further the interests of homœopathy.

HOMŒOPATHIC FREE DISPENSARY OF LEAVENWORTH, KANSAS.

Martin Mayer, M.D., Delegate.
Martin Mayer, M.D., Resident Physician.

This institution was organized January 26, 1866, and at once commenced operations. It is supported by subscriptions and voluntary contributions, and has been very successfnl.

Two hundred and fifty-eight patients were treated, and seven hundred and eighty-four prescriptions made, during 1867. Nine out-patients and six obstetric cases also came under the care of the Dispensary.

5. — COLLEGES.

NEW YORK HOMŒOPATHIC MEDICAL COLLEGE.

J. Beakley, M.D., Delegate.
J. Beakley, M.D., New York, Dean.

This College, during its eighth session, 1867–68, had eighty-

six matriculants, forty-two of whom graduated in March of the present year. The public hospitals to which the students have access are very extensive; and, as three of the professors of the College are connected with the New York Ophthalmic Hospital, every facility is afforded for observation and instruction in diseases of the eye and ear. The next session will begin with a preliminary course in October.

Faculty.

J. Beakley, M.D., Surgery.
D. D. Smith, M.D., } Obstetrics.
E. M. Kellogg, M.D., }
S. B. Barlow, M. D., } Materia Medica.
Carroll Dunham, M.D., }
P. P. Wells, M.D., } Practice.
A. R. Morgan, M.D., }
F. W. Hunt, M.D., Jurisprudence.
H. M. Smith, M.D., Physiology.
T. F. Allen, M.D., Anatomy.
J. J. Mitchell, M.D., Chemistry.

HAHNEMANN MEDICAL COLLEGE OF PHILADELPHIA.

J. C. Morgan, M.D., Delegate.
Constantine Hering, M.D., Philadelphia, Dean.
Richard Koch, M.D., Philadelphia, Registrar.

The endeavor to give more complete instruction in the arts and sciences collateral to medicine has met with a cordial response from the profession. The place occupied last year was found too small for the unexpectedly large class, and a fine building on Tenth Street, above Market, has been obtained. The collection of dried preparations in the museum is as large as that of any school in Philadelphia. The library contains more than six hundred volumes. The number of matriculants the last term was sixty-one; of graduates, twenty-six.

Faculty.

Constantine Hering, M.D., Institutes and Materia Medica.
C. G. Raue, M.D., Practice.
J. C. Morgan, M.D., Surgery.

Richard Koch, M.D., Physiology.
A. R. Thomas, M.D., Anatomy.
Lemuel Stephens, M.D., Chemistry.
O. B. Gause, M.D., Midwifery.

HOMŒOPATHIC MEDICAL COLLEGE OF PENNSYLVANIA.

R. A. Phelan, M.D., Delegate.
H. N. Guernsey, M.D., Philadelphia, Dean.

The twentieth annual Commencement was held Feb. 20, 1868. The degree of Doctor of Medicine and the special degree of Doctor of Homœopathic Medicine were conferred on thirty graduates. The list of matriculants of the last session embraces sixty-five names. The College takes rank with any medical school in the country; being perfectly appointed, with a thoroughly organized faculty, and very good facilities for practical clinical instruction.

Faculty.

T. Dwight Stow, M.D., Practice.
Adolph Lippe, M.D., Materia Medica.
H. N. Guernsey, M.D., Obstetrics.
Malcom Macfarlan, M.D., Surgery.
R. J. McClatchey, M.D., Anatomy.
Wm. L. Arrowsmith, M.D., Physiology.
Pemberton Dudley, M.D., Chemistry.

HAHNEMANN MEDICAL COLLEGE, CHICAGO.

A. E. Small, M.D., Delegate.
A. E. Small, M.D., Chicago, Dean.
R. Ludlam, M.D., Chicago, Registrar.

The two-term system of this school is abolished, but a preliminary course of two weeks precedes the regular course. The clinical advantages of Chicago exceed those of any other American city, except New York. Within ten minutes' walk of the College is the City Hospital, which annually receives two thousand patients. Through the year, there are delivered two weekly clinical lectures on Surgery; two on Practice of Medicine, and

one on Diseases of the Eye and Ear. Seventy-three autopsies were made there in the last year, nearly all in the presence of the class.

Faculty.

A. E. Small, M.D.,
George E. Shipman, M.D., } Emeriti.
H. P. Gatchell, M.D.,
N. F. Cooke, M.D., Theory and Practice.
R. Ludlam, M.D., Obstetrics.
G. D. Beebe, M.D., Surgery.
Rodney Welch, M.D., Chemistry.
T. Bacmeister, M.D., Materia Medica and Therapeutics.
J. S. Mitchell, M.D., Physiology.
H. C. Allen, M.D., Anatomy.
D. A. Colton, M.D., Pathological Anatomy.
C. Woodhouse, M.D., Medical Jurisprudence.

HOMŒOPATHIC MEDICAL COLLEGE OF MISSOURI.

E. C. Franklin, M.D., Delegate.
J. T. Temple, M.D., St. Louis, Dean.
E. C. Franklin, M.D., St. Louis, Registrar.

The cabinet of the College has been greatly improved since the last report. The building — forty feet in front, and one hundred and ten in depth — proves to be admirably adapted to its purpose. Part of it is being fitted up for a hospital for surgical cases. The number of students was fifty-six, of which number twenty-one were graduates.

Faculty.

J. T. Temple, M.D., Materia Medica.
J. H. P. Frost, M.D., Practice.
E. C. Franklin, M.D., Surgery.
T. G. Comstock, M.D., Midwifery.
Charles Vastine, M.D., Physiology.
S. B. Parsons, M.D., Anatomy.
N. D. Tirrell, M.D., Chemistry.

6. — JOURNALS.

NEW-ENGLAND MEDICAL GAZETTE.

H. C. Angell, M.D., Delegate.
H. C. Angell, M.D., Boston, } Editors.
I. T. Talbot, M.D., Boston,

Established in 1866 by the New-England Medical Gazette Association. To pre-paying subscribers, the serial publications of the Massachusetts Homœopathic Medical Society, issued during the time of their subscription, are furnished gratuitously.

Boston, monthly. 8vo. pp. 24. $2.00.

NORTH-AMERICAN JOURNAL OF HOMŒOPATHY.

F. W. Hunt, M.D., Delegate.
William Radde, Esq., New York, Proprietor.

The departments are under the charge of separate corps of editors, selected from among the most competent, talented, and reliable homœopathic physicians of this country. It is national, not sectional, and rigidly homœopathic. It is, as far as possible, under the patronage of the American Institute of Homœopathy, and other kindred organizations. The North-American has already completed its sixteenth volume.

New York, quarterly. 8vo. pp. 144. $4.00.

AMERICAN JOURNAL OF HOMŒOPATHIC MATERIA MEDICA.

J. C. Morgan, M.D., Delegate.
Constantine Hering, M.D., Philadelphia, } Editors.
H. N. Martin, M.D., Philadelphia, }

This journal, established last year, is the property of the Hahnemann Medical College. Its aim is, to furnish to the profession a complete materia medica, and to collect into a compact form, for convenient reference, all the instructive cured cases now scattered through our literature. The number of subscribers is 700.

Philadelphia, monthly. 8vo. pp. 24. $2.00.

HAHNEMANNIAN MONTHLY.

T. Moore, M.D., Delegate.
R. J. McClatchey, M.D., Philadelphia, Editor.

This journal is published by the Homœopathic Medical Col-

lege of Pennsylvania. The annual volume contains 576 pages, mostly of original matter. The fourth year will commence in August, 1868.

Philadelphia, monthly. 8vo. pp. 48. $3.00.

OHIO MEDICAL AND SURGICAL REPORTER.

T. P. Wilson, M.D., Delegate.
T. P. Wilson, M.D., Cleveland, Editor.

The editor, as well as the zealous contributors, labors gratuitously for the good cause. The *Reporter* aims to be an original and independent representative of the homœopathic medical school. It is in the course of its second volume.

Cleveland, bi-monthly. 8vo. pp. 32. $1.00.

AMERICAN HOMŒOPATHIST.

E. B. Thomas, M.D., Delegate.
E. B. Thomas, M.D., Cincinnati, Editor.

This journal has just closed its fourth volume.

Cincinnati, monthly. 8vo. pp. 32. $1.50.

AMERICAN HOMŒOPATHIC OBSERVER.

E. A. Lodge, M.D., Delegate.
E. A. Lodge, M.D., Detroit, General Editor.

This journal is now in its fifth year. It has seven special editors, of as many departments. It has an extensive circulation, and aims to give to the homœopathic profession the largest amount of practical information.

Detroit, monthly. 8vo. pp. 56. $2.00.

UNITED STATES MEDICAL AND SURGICAL JOURNAL.

G. E. Shipman, M.D., Delegate.
G. E. Shipman, M.D., Chicago, Editor.

Established in 1865, as the organ of the Western Institute

of Homœopathy, by G. E. Shipman, M.D., editor, and C. S. Halsey, publisher. Seven assistant editors have charge of as many departments. The issue amounts to 1,000 copies. The journal is committed to neither extreme of the homœopathic school, and allows entire liberty to its correspondents.

Chicago, quarterly. 8vo. pp. 128. $4.00.

THE MEDICAL INVESTIGATOR.

T. C. Duncan, M.D., Delegate.
T. C. Duncan, M.D., Chicago, Managing Editor.

First published in 1857 as a popular journal, it soon became exclusively scientific and medical. It is now the oldest monthly homœopathic journal published in this country. Avoiding polemics, it aims, by its practical articles, to improve the science and art of medicine.

Chicago, monthly. 8vo. pp. 32. $2.50.

WESTERN HOMŒOPATHIC OBSERVER.

W. T. Helmuth, M.D., Delegate.
W. T. Helmuth, M.D., St. Louis, Editor.

This journal, now in its fifth year, occupies the most Western field of homœopathic journalism. It seeks, by original and practical articles, to assist the physician in his daily needs.

St. Louis, monthly. 8vo., pp. 20. $1.50.

SECTION VII.

REPORTS

OF THE

BUREAUS OF ANATOMY, PHYSIOLOGY,

AND

HYGIENE:

ANATOMY.	T. F. ALLEN, M.D.	New York.
	JOHN C. MORGAN, M.D.	Philadelphia.
	H. C. ALLEN, M.D.	Cleveland.
	MELVILLE BRYANT, M.D.	Brooklyn.
	J. B. HOLTBY, M.D.	New York.
PHYSIOLOGY.	J. H. P. FROST, M.D.	Philadelphia.
	C. VASTINE, M.D.	St. Louis.
	T. P. WILSON, M.D.	Cleveland.
	H. P. GATCHELL, M.D.	Kenosha, Wis.
	J. J. MITCHELL, M.D.	New York.
HYGIENE.	CARROLL DUNHAM, M.D.	New York.
	G. E. SHIPMAN, M.D.	Chicago.
	T. G. COMSTOCK, M.D.	St. Louis.
	J. H. PULTE, M.D.	Cincinnati.
	C. W. BOYCE, M.D.	Auburn, N.Y.

TO THE

TWENTY-FIRST SESSION

OF THE

American Institute of Homœopathy.

VOLUME I. NUMBER 1.

CONTENTS.

I.	Report on Anatomy	T. F. Allen, M.D.
II.	Report on Physiology	J. H. P. Frost, M.D.
III.	The Province and Medical Application of Hygiene	Carroll Dunham, M.D.
IV.	Atmosphere and Water	N. D. Tirrell, M.D.
V.	Alcohol as a Hygienic Agent	C. W. Boyce, M.D.
VI.	Formation of Sound Teeth	H. S. Chase, M.D., D.D.S.
VII.	Shedding of Deciduous Teeth	H. S. Chase, M.D., D.D.S.

I.

REPORT ON ANATOMY.

BY T. F. ALLEN, M.D., NEW YORK.

In presenting a report on Anatomy, it seems proper to preface a few words concerning its scope, and methods of study.

Anatomy, in its broadest sense, is, as we know, a most extensive science, embracing the study of the whole animal kingdom, past as well as present. To the whole of this immense range, neither the student nor practitioner of medicine can be expected to pay attention; yet the study of comparative anatomy in a general way is of the greatest importance to the scientific medical man, inasmuch as it affords the key to many of the mysteries of the human frame. It explains the meaning of parts and their relations, and teaches most instructive lessons in regard to the grand laws of development.

More of purely scientific animus is the great need of our school. Everything that helps to remove disease and relieve suffering is humane and practical, and should be eagerly sought; but the physician should love science for its own sake. He should study Nature, her laws and her eccentricities; his rides should be pleasure trips; in the flowers he should see beaming faces of friends. Let him take pleasure in the geology of his region, and study its influence on animal and vegetable life. In short, a physician should be a naturalist, and the study of natural science is as much a recreation as are games, or light literature.

Not only must broad and comprehensive study be pursued,

but that of the minute structure of life — especially of the human organism — must be undertaken. To this end, books and microscope should be obtained and used. Every physician, without exception, should possess and use a microscope. The examination of his patients demands its use. To be able to utilize this instrument understandingly in disease, one must be fully acquainted with the microscopic appearance of healthy tissue: so it comes about that the study of minute anatomy must be as thoroughly and closely taught as the special, descriptive, and topographical branches.

The student must at the outset become thoroughly acquainted, not with bones only, but with the general plan of the animal kingdom, the elementary composition of tissues and their ultimate structure. This study of parts of animals belongs as much to the bureau or chair of anatomy as does the description of the bones themselves. Physiology has, by courtesy, embraced the study of minute anatomy, but only that a clearer statement of the use and office of organs may be made after the elucidation of their minute structure. We concede that anatomy should precede physiology; and to works on physiology may be assigned the duty of giving the minute anatomy of the organ of which it explains the office; still general histology, or microscopical anatomy, properly belongs to anatomy. This science has assumed such bulk of late that it seems almost necessary to create special chairs for its prosecution; at least, no small proportion of a course of lectures should be devoted to this branch. Even during the past year, no little progress has been made in this section.

Kölliker has issued the second part of the fifth edition of his Handbook of Histology, embracing much that is new. Besides this, there is a large number of monographs, and other works upon methods of investigating, with theories upon the development of tissues.

Spontnaeous development is, for the present, quite dead;

omnis cellula e cellula is now the law: but some exceedingly interesting observations have been made upon the movements of cells, especially of free cells. It is asserted, apparently upon good authority, that the walls of the capillaries do not suffice to confine the blood-corpuscles; that the white and even the red also have been seen to writhe and wriggle themselves through and get out. Hence certain speculations on the origin of pus-corpuscles, which, to my mind, are by no means satisfactory.

It is appropriate to refer here to the accepted and practical division of histology. The four grand divisions of tissues consist of cellular and fibrous elements, compact and compound tissues.

The first division (cellular elements), comprises two sections: cells in fluid blastema, and in fixed blastema. In the fluid blastema are found cells of blood, chyle, lymph, mucus, milk, colostrum, and serum; in the fixed blastema are ephithelium and pigment.

The second division (tissues with fibrous elements) consists of connective tissues, lens, muscle (smooth and striated), and nerve tissue.

The third division (compact tissues) consist of cartilage, bone, and dental tissues.

The fourth division (compound tissues) consists of vessels, glands, skin, and hair.

To my mind, a division partly on the basis of Virchow's theories is very simple and practical for explanation. Of the two divisions, the first would include all tissues essentially cellular composed of aggregated cells. These tissues are allied closely to those of the vegetable kingdom. Examples of this tissue — rarely composing organs in the human frame — are found in the umbilical cord, and in mucous layers of cells covering membranes, etc.

The second division of tissues would include those with in-

termediate inter-cellular substance, — cartilage and connective tissues. The form of the cell makes no difference: it need not be called fibrous because the cells are thread-like, nor compact because they lie close together. The transition is easy from simple aggregation of cells to cartilage or connective tissues; from these again to bone; or from connective and fibrous tissues to muscles; and so on through the whole economy. Tissues are interchangeable; bone may be formed anywhere, from almost every tissue. As every variety of tissue is formed gradually from aggregation of cells, multiplying and exuding, so must we follow nature in classifying or describing them. Dividing lines here, as everywhere, are very arbitrary.

The method of preparing tissues for examination is very important, especially that of staining, — some substances staining muscle-fibre, others, nerve-fibre: great progress may be expected in this direction. In this way muscular tissue has been found in unexpected places, and nerve-endings traced and determined. The most important agent brought to notice recently is the chloride of palladium, which stains muscle yellow, and nerves black or gray. Further information must be looked for in the journals, as the technics of the microscope cannot be discussed in this report.

During the past year, the first part of the third volume of Henle's Systematic Anatomy has been issued from the German press. Besides being a comprehensive and scientific work, it is the finest in execution and illustration that has ever been issued. More than one hundred pages are occupied with varieties of the arteries, and about twenty-five pages with varieties of the veins.

I would call attention to the issue of an elaborate Atlas of Topographical Anatomy, illustrated by sections of the frozen body. The subject is placed for some days in a freezing mixture until it is perfectly frozen. Sections are then made with a saw. There is unquestionably no more perfect method of study-

ing the relations of parts than this. It is easy of execution, and within the power of every one.

Two methods of preservation of bodies have been advanced this year. That of Brunetti (better adapted for portions only of the subject, and by which some most beautiful preparations have been made) consists of, first injecting the vessels with water, and, after from two to five hours, injecting alcohol, then ether and a solution of tannic acid; then, in order to dry the preparation, it is placed in a case, surrounded by boiling water, and a stream of warm dry air forced through the vessels and ducts, so that it shall preserve its natural fullness.

The other method is, by washing the body with a solution, of which the composition is not yet published. This so permeates the whole body that it is perfectly preserved for an indefinite length of time. I understand that bodies have been recently dissected at Bellevue Hospital, in the presence of large numbers of physicians, which have been preserved for over three months as perfectly fresh as if dead but a few hours.

Two interesting reports upon the action of muscles deserve attention; one on the action of the intercostals, the other on the long muscles passing over two joints.

In conclusion, I would impress upon physicians generally the importance of practical anatomy, which is, at present, so much neglected. An exact knowledge of the location of viscera, and vessels, and their mutual relations, is never over-estimated.

Physicians always regret that they paid so little attention to dissection when students, and that they left college with such imperfect knowledge of the human frame. Let preceptors, then, insist upon their students acquiring an accurate knowledge of every portion of the human frame, and of the viscera especially. Thus will our standard of medical education be essentially advanced.

II.

REPORT ON PHYSIOLOGY.

BY J. H. P. FROST, M.D., PHILADELPHIA.

In attempting to prepare a Report on Physiology, we are aware that the space and time at our command will neither admit of a full account of late discoveries, nor allow a complete notice of recent publications in this science. Nor, indeed, is either the one or the other essential to our present object; for the minute points of difference presented by the latest investigators are not of such relative importance as materially to affect those great principles, or to change that general tendency of physiological study, to which we wish to invite attention. The incidental references which will be made to some of the more recent and important works on physiology will serve as a sufficient basis for our remarks, and, at the same time, recall certain notable features of the works themselves.

The great discoveries of the elder anatomists have been complemented and their errors corrected by the more minute, and particularly by the microscopic explorations of their successors. All the organic structures and elementary tissues may now be deemed to have been so well delineated and described as to leave but small scope for further discoveries. The men whose patient and profound studies erected histology into a distinct science have scarcely yet passed from the stage of active life. And the still disputed histological questions as to cell-growth, formation, and development can be settled only by employing

more delicate and more powerful optical instruments than those now in use.

The same remark is true of physiology also, with this difference: that, as the mooted points relate rather to principles than to phenomena, the needed improvement must be in the *rationale* of the mode of investigation, rather than in its *matériel.*

Exceptions to this remark may perhaps be made in respect to some questions connected with reproduction, which may be still further elucidated by more numerous and repeated experiments, — especially questions relating to the seat of conception. Dr. Ritchie, in his recent work,* which will be found indispensable to those desirous of becoming acquainted with the history and present condition of ovarian physiology, gives a condensed summary of the principal opinions and discoveries from the earliest times. In his own conclusion, he "is yet constrained, in regard to the human female, to revert to the ancient theory, that the sacculated distal ends of the [Fallopian] tubes are true *receptacula seminalia aut ovorum;* that the tubes are deferent and ejaculatory canals or oviducts; and that the normal seat of conception is the uterus."

In physiology, the cell-germ is seen to bear to the microcosmic organ of which it forms a part, and to the macrocosm of the entire body, a relation similar to that of the ancient monad or modern atom, to the world or to the universe. In the three great processes which pertain to all organic life, — growth, reproduction, and decay, — the physiology of each minute constituent part is acknowledged to correspond to that of the resultant whole. The type of the life of the entire body finds its antitype in the life of every microscopic cell-germ. In like manner, through the whole course of comparative anatomy and physiology, organic life is traced in a constantly ascending series, from

* Contributions to assist the Study of Ovarian Physiology. By C. G. Ritchie, M.D. London, 1865.

the lowest and simplest to the highest, most complicated, and perfect forms of development.

And yet, as Dr. Flint observes in the first volume of his valuable but still uncompleted work on physiology,* "the organic principles never exist alone, but always in combination with inorganic substances which are essential to the performance of their vital functions in the economy." The aggregate is the result of this combination of lower or inorganic with higher or organic substances, they being truly united, made one, and the lower form vitalized by the predominating influence of the higher. This law, which is thus seen to pervade the basement-structure of all phenomenal physiology, will subsequently appear to have its counterpart in the most remarkable ultimate principles of the higher or dynamic physiology. Here also it becomes evident that the method of study to be followed in this science should be neither chemical, mechanical, nor physical, but truly and exclusively physiological. Against the destructive-analysis methods of exploration, pursued by some professed physiologists of the present day, our author enters a protest not unlike that set forth by J. J. G. Wilkinson some twenty-five years ago.† And, in the broader and more enlightened view of physiological phenomena, the reproduction of the species, which is the highest function of the individual, is seen to be

* The Physiology of Man; designed to represent the Existing State of Physiological Science, as applied to the Functions of the Human Body. By Austin Flint, Jr., M.D. Vol. I.—Introduction; The Blood; Circulation; Respiration. Vol. II.—Alimentation; Digestion; Absorption; Lymph and Chyle. New York: 1866–67.

This work is indeed an honor to our profession and to our country; and it is especially suited to the needs of those physicians who desire to continue and extend their acquaintance with the noblest of all the sciences collateral to medicine.

† Introduction to Economy of the Animal Kingdom, American Edition, p. 337. Compare also Whewell's History of the Inductive Sciences, vol. ii., p. 436.

but an extended development of its own nutrition, or constant individual reproduction. This is still more obvious where we look at the example of those lower species in which both sexes are united in one person.

Such desultory and confused observations as these, which crowd into the mind as we turn over the pages of a work like Dr. Flint's, or pause for a moment to reflect upon the theories which it suggests, show the necessity of a proper arrangement of physiological study. And, in our view, this object, and also the complete development of the science itself, may be promoted by a threefold classification; namely: —

I. The description of the phenomena of physiology; II. The natural dynamics of physiology, or the investigation of its "*proximate* causes"; and, III. The supernatural dynamics of physiology, or the determination of its "*final* causes."

Let us endeavor, from a brief consideration of these three classes, as well separately as in the relation which they hold to each other, to construct the outline ideal of a complete physiology, which shall at once comprehend the present *status* of the science, and provide for its future and still more complete development.

I. *In descriptive physiology*, there now remains little to be done. All the functions, operations, and processes of the larger and smaller parts of the human body have been minutely explored and accurately described. The entire physiological life, even of tissues which, like the cell-germs, are invisible to the unassisted eye, has been revealed in a manner that cannot be surpassed until other and far superior instruments are invented. And now, as the result of the combined labors of the earlier and later physiologists, we have an immense mass of facts and phenomena, both particular and general.

But facts and phenomena alone, however numerous and extensive, can never make a science. Such is the constitution of the human mind that it cannot rest satisfied without investiga-

ting, as far as possible, the causes of all observed phenomena. Indeed, the study of phenomena is inseparably connected with that of their causes; we are thus naturally and necessarily led from the study of life to the exploration of vital forces, or the causes of vital action. In its primary and still imperfect stage, this latter study has, indeed, been termed the science of life; but its ultimate and complete development alone can lead us to a true philosophy of life.

The present condition of this study is, however, well expressed in the following words of the learned Whewell:* "Though all the discoveries which have been made with respect to particular functions or organizations are understood to be subordinate to the general science, the philosophy of life, yet the principles and doctrines of this science nowhere exist in a shape generally received or assented to among physiologists." Nor, in the language of another, "can facts be duly respected, unless they are seen as the agents of uses, and results of ends and causes."

It is in this very direction, therefore, that physiology now most needs to be developed, — in the very direction in which some of the greatest of her votaries, as if instinctively conscious of the necessities of the case, have long and earnestly labored. But, at the best, their labors have been productive of meagre and unsatisfactory results. Nor, indeed, could it have been otherwise; since they were neither guided by an accurate conception of the dual nature of the causes they were investigating, nor illuminated by the perception of the grandeur of the ultimate development and wonderful union of these "proximate" and "final causes" in the constitution of man.

II. In the *natural dynamics of physiology*, the way at first is broad and plain. But it soon shows itself incomplete, or rather like a magnetic telegraph which can convey no intelligible message because its return-circuit is wanting. Heat, light,

* History of the Inductive Sciences, ii. p. 436.

electricity, gravity, chemical affinities, *et id genus omne*, be their number greater or less, be their natures severally distinct, or capable of resolution into one, — these are the forces of nature; for under their powerful influence is maintained the mechanism of the universe and of all its parts. Under their influences, planets are constructed out of nebulous mists. and order established in place of chaos. Under their influences, through silent and unknown ages, have been going on the stratification of the earth's crust, and the crystallization of her inorganic substances. These are also the vital forces; for under their benign influence proceeds the entire development of organic life, which, inanimate in the vegetable kingdom, intelligent in the animal, and rational in man, advances in a continuous series, and in a succession of series, from lowest to highest.

Production marks the operation of these influences in the inorganic world, reproduction in the organic. How grand the results in either case, but how immense the difference! Here, then, arises the great problem of physiology: given, the world of inorganic matter and these forces of nature, how does it happen that one portion of the results of the operation of the latter upon the former remains forever a mere production, while the other — the vital portion — becomes capable of reproduction in such infinite diversity? Or, transferring the question to the still higher field of the organic world alone, how does it happen that the same forces of nature — the same vital forces, as we may here term them — produce, on the one hand, unintelligent vegetation, such as plants and trees; and, on the other hand, consciously intelligent beings, which may possess not only reason and judgment, but all those still loftier spiritual powers which display themselves in man?

The mere statement of such questions would seem to be almost an insult to human intelligence: as if any one could suppose there were no other and higher agencies employed in the evolutions of such sublime results! But there have been many

in the earliest times, as there are even now, who can find no other cause for all these various manifestations of physiological or even spiritual life than these natural forces. And these persons — whether physiologists or philosophers, whether heathen or nominally Christian — assume principles logically and inevitably leading to the slough of materialism. However cautiously these men may protest against such a conclusion, their course leads to absolute atheism.* And it must be confessed that, in respect to the array of the arguments and mustering of forces, the materialists have had the advantage of their opponents. For on their side, they have the forces of nature, manifestly powerful, confessedly efficient to an unknown extent, and which — with great apparent plausibility — they claim to be all-sufficient; on the other side, the battle array has been set, and the contest itself too exclusively fought upon what the lawyers term 'a feigned issue.' A certain abstraction, known as the vital principle, has been put forward as the champion of those opposed to the materialists; and into the lists have entered the organism on the one side, and the vital principle on the other. Now, as the organism represents the natural facts from which it directly springs, we have the formal question, Does the organism produce life, or does the vital principle create the organism?

Such is the ordinary statement of the question; a position in logic which resembles that of the combatants in a duel, — one of

* It may suffice to remark in this connection, that the principal advocates of natural forces as the exclusive vital agencies — such as Epicurus among the Greeks, Lucretius (his Roman Boswell), Baron d'Holbach, and Compte in France — were avowed atheists.

Of Cabanis, who has oftenest been quoted as one of the most pronounced of the materialists, it may be said that, in a posthumous work entitled A Letter upon Primary Causes, he departs from his original notions and manifests a decided tendency toward spiritualism in all the three departments — psychology, morals, and theology.

Vide Morell's History of Modern Philosophy, p. 338; Ritter's History of Ancient Philosophy, vol. iii. p. 436; National Quart. Review, 1868, March, pp. 217–233.

whom is placed with his back to the sun, while the other is dazzled by the light full in his face. The "life"—living action, spoken of in the first form of the question as the result of the material organization—is a substantial manifestation; but the "vital principle," proposed in the second form of the question as the logical creator of the organism, is an abstraction only,—not an acknowledged entity,—an abstraction in the defence of which is consumed an amount of argumentative energy which should have been more profitably employed in assaulting the strongholds of the materialists.*

The elaborate *materialism* which so insidiously and sophistically pervades Dr. Maudsley's recently published work,† which in other respects is an able and exceedingly valuable book, revives the whole question of the true nature of the vital forces; and, unless refuted, will inevitably lead many a young physician and medical student much farther from the truth than the author himself would venture. Our space not admitting extended quotations, we must refer to the work itself in confirmation of our

---

* This fallacious abstraction of a supposititious vital principle, which has so manifestly hindered the development of true physiological science, finds its counterpart in the allopathic figment of disease as an actual entity, distinct from disordered vital action; a man of straw which has much obstructed the realization of a true science of Pathology. Compare Fletcher's Rudiments of Physiology, Part II., c. II., On Nature of Life; Wagner's Elements, p. 644, and Müller's Elements of Physiology, vol. ii., p. 133.

† The Physiology and Pathology of the Mind. By Henry Maudsley, M.D. London: 1867.

The January number of the *American Journal of Medical Sciences* contains a very judicious review of this work, by an "esteemed contributor and valued friend," since deceased, in which the author's materialism and inconsistencies are plainly exposed. The *Quarterly Journal of Psychological Medicine*, in which we confidently expected to find a similar earnest protest against erroneous doctrines, merely gives, in the October number, "quite fully the thread of the author's argument," without offering any opposition or reply to his remarkable views.

remarks, and rest content with citing one or two points only, in order to show the dangerous nature of the author's doctrine; for error is always dangerous in proportion as it either assumes the semblance of truth, or intertwines itself with its reality; and both these methods are employed with much facility in the present work.

Referring to the waste of nerve-substance, which every physiologist knows must attend mental action, Dr. Maudsley represents thought as the result of some change "in the nervous elements of the brain." Instead of regarding the nervous system and thence the entire body, as a garment and instrument which has been constructed for the mind (or which, from a different point of view, the mind may be deemed to have constructed for itself), and which has grown with its growth and strengthened with its strength, he looks upon mind as entirely dependent upon the body; "mental action" being, according to Dr. M., "as surely dependent upon the nervous structure as the function of the liver confessedly is upon the hepatic structure." The same form of doctrine the author applies to the human will, making that also absolutely dependent upon involuntary changes in the physical state. Thus he undermines, at the same time, the foundations of all moral responsibility. We think that a careful examination of this work will lead every one to adopt our own conclusion, — that the materialism which it so plainly teaches, and the fatalism which it no less necessarily involves,— not to speak of the atheism to which it must inevitably lead all who follow its doctrines to their natural and certain ultimation,— cannot but render this book one of the most dangerously pernicious of all that have appeared in modern times; a book which well deserves the criticism of Voltaire upon Baron d'Holbach's *Système de la Nature*, — "illogical in its deductions, absurd in its physics, and abominable in its morality."

Such, in reality, are the conclusions to which all must inevitably come who attempt to construct a science of physiology by

means of its natural dynamics alone; for their range of causes not only fails to cover the intellectual, the moral, and the spiritual phenomena of life, — by far the greater portion of all, — but these causes prove incapable even of accounting for the existence of life. We need not further, in this connection, illustrate these natural forces, which correspond to the external or material portion of the human organism, and which we have termed the natural dynamics of physiology; since they have ever been sufficiently, if not too exclusively, treated by most physiological writers. Let us rather endeavor to point out another class of causes, which shall correspond to the highest nature of man; which shall prove capable of accounting for all the phenomena hitherto inexplicable; and which shall, at the same time, account for the existence of even the highest form of life, — in man.

Nor should we allow ourselves to be deterred by the reproach of being "visionary" or "transcendental"; for he is but poorly *en rapport* with the spirit of the present age who does not realize the "manifest destiny," if not of all science certainly of that of physiology. This destiny impels it to look with ever-longing eyes towards psychology, and — distrusting its natural and material foundations as involving conclusions irreconcilable with admitted truths — to seek a more substantial ground for the philosophy of life in the higher, spiritual nature of man. Let us not be deterred by the consciousness of our inability to do justice to a theme so important. We will be content, like the finger-post by the roadside, only to point out the direction, even if unable to illuminate the road. And we proceed to the third division of our subject, —

III. *The supernatural dynamics of physiology;* still continuing to base our remarks on Dr. Maudsley's work. Dr. M. confines his attention to the influences which the material body, and through it the external world (natural forces), exert upon the mind. He lays great stress upon the mind's dependence upon

the body for social intercourse and the various purposes of life. But he fails to state the no less important truth in the natural history of man, that the body is still more dependent upon the mind; that while the body, deprived of the soul, is either dead, or remains in a state of inactive vegetative life, the soul itself — as in the state of trance — may temporarily leave the body, and in this condition find its activity wonderfully increased. Nor yet does he give us any glimpse of that other and, in this connection, still more momentous truth, — of the supernatural influences which descend upon man through the higher law of his spiritual nature, and of the influences which, transmitted through man, powerfully affect the inferior orders of the animal creation. Such considerations as these were, no doubt, foreign to the restricted and directly practical plan adopted by our author. But they are essential to us now, in order that we may correct his errors, and ourselves complete the picture of which he has drawn but the lower and darker portion. They are essential to us also now, in order that we may form for ourselves a complete outline ideal of physiology as the true science of human life.

The forces of nature may indeed seem sufficient to account for the production of vegetable life. We see the plants grow up under the influence of the sun's light and heat; and it is difficult enough to determine where the vegetable kingdom ends and the animal begins. We might hope to account for even the lower forms of animal life: but not so with those higher forms of life in which are manifested the intellect, the mind, the soul; still less with those highest forms of all, in which the moral nature appears, and in which the physical frame and all its powers and intelligent faculties are absolutely ruled by a far-reaching, determined, and unchanging will, which allows neither distance of space nor length of intervening time to prevent the accomplishment of its chosen objects.

Even the inorganic forms of nature reveal to us glimpses of

the needed truth, expressed in the doctrine of final causes,— which is the technical name for the inherent usefulness with which all these forms are replete. The grain of silicious earth, which is capable of becoming a powerful and invaluable medicine, is as truly illustrative of the doctrine of final causes as is the heart with its wonderful adaptation to the circulation of the blood, or the stomach, to the digestion of food. And, as every particle of an inorganic homogeneous mass possesses all the qualities of the whole; so each minutest organ in an organic structure is not only endowed with its own special functions, but contributes also to the performance of all those functions accomplished by the whole body of which it forms a part.

The real existence of final causes, in this sense, none can venture to doubt. For it is now confessedly irrational to assert that any of all the different forms of inorganic substances, or of the different degrees of vegetable and animal existence, were not intended and especially designed for the fulfilment of the various uses for which they are, in their respective spheres, so wonderfully adapted. The power inherent in a particle of gold, or, as it may otherwise be termed, its dynamic causality-relation to the human organization,— by means of which it may be capable of removing mental depression and curing a tendency to suicide,— is a no less wonderful and conclusive proof of design, than is the complicated mechanism of the hand, in its adaptation to all the various necessities of human life. This law of use, which is in itself an immaterial and truly spiritual principle, constituting the soul of all material substances, is, indeed, "a power behind the throne" of all the natural and material forces, however efficient these latter may be deemed.

But here we are reminded that even in these "forces of nature"— so venerated, as if they were at once self-existent and omnipotent— may be discerned the overruling influence of the same final causes. Not, indeed, by blind chance do the sun's light and heat develop a world, and people it with an infinite

series of organized beings adapted to the needs of man. Neither in the forces of nature, nor in their immediate results, can blind chance be said to rule; for those forces and these results,—as well the inorganic as the organic,—are alike inspired by the same benevolent and truly spiritual principle, the law of use. This law pervades them all. The forces of nature, which illuminate the world by their own splendor, and fill it with the direct results of their own potent influences, and all these various results themselves,—all, all pervaded by the self-same universal law of use,—eloquently proclaim, in the very language of nature, through the great doctrine of "final causes," a power still prior to, still higher than themselves, in an intelligent, benevolent, Creative Will.

And thus even these "natural forces," which we have termed the natural dynamics of physiology—from being in reality derived, however remotely, from the First Great Cause,—are also seen to be, in a certain and most important sense, supernatural. Thus do these "final causes" also, of which all must now admit the existence, unite the two classes of forces, to both of which they are manifestly common. They bridge over the open space between the natural and the supernatural dynamics of physiology. Thus are the domains of pure science extended, and no longer degraded to the narrow confines of the earthly and the material. They are made to include those principalities and powers in higher and even in heavenly places, through which the finite mind with steadfast and determined will, advancing from strength to strength, pursues eternally the study and worship of the Infinite. And thus finally, in their last and highest analysis, these distinctions of natural and supernatural will be seen to be but temporary and unreal; for the forces which flow into man through the natural world beneath, as well as those which flow into him through the spiritual world above, must all be ultimately referred to the same Supreme Source. And here we should seem to anticipate our conclusion were we not thus insensibly,

inevitably led to the manifest truth that, as inorganic and organic substances are necessarily combined in order to the production of an organism suitable for vital action; so forces proceeding through the natural world and forces proceeding through the spiritual world must be combined in order to produce the complex mystery of human life. The recognition of this great truth in its fullest extent is, we believe, the essential condition of a complete science of physiology, of a true philosophy of life.

We know, as a fact in phenomenal physiology, that "organic principles never exist alone, but always in combination with inorganic substances which are essential to the performance of their vital functions in the economy." And we believe it will be admitted to be equally a fact in the dynamics of physiology, that the higher or supernatural forces never exist alone, but always in combination with the lower or natural forces, which are essential to the production of human life. We believe that, as, on the one side, the natural forces which are essential to life flow in through successive degrees of organized substances from below upwards; so, on the other side, the spiritual forces essential to life flow in through the successive orders of spiritual beings from above downwards. And we believe that what is true of both the natural and the supernatural forces, the union of which results in human life, is equally true of that life itself,—that all power and all life, whether natural, human, or spiritual, proceeds only from one and the same Infinite Source.

In conclusion, we would suggest that, inasmuch as physiology has already been advanced as far as it well can be by the help of its natural dynamics alone, we should now turn our attention towards its supernatural dynamics, and endeavor to discover whether the exploration of the hitherto neglected "spiritual forces" may not throw some light upon much that is still obscure in connection with the "natural forces," and thus elucidate the profounder problems of physiology. And we think that this

course will be found necessary, in order to prevent such a retrograde tendency to materialism as cannot but prove fatal to all science; in order to enable this science to keep pace with the advancing spirit of the age; and in order to render physiology itself what it ought to become, and what we trust it will become — the true and complete science and philosophy of human life.

III.

THE PROVINCE AND MEDICAL APPLICATION OF HYGIENE.

BY CARROLL DUNHAM, M.D., NEW YORK.

THE investigations that were necessary to the preparation of a report on hygiene, and the conferences which they involved, have revealed the fact that differences of opinion and some confusion of ideas exist in our profession touching the province, limits, and relations of the science of hygiene. It has, therefore, seemed to me not inappropriate to discuss, in the first report of this Bureau, the general scope and province of this science, and its relations to therapeutics and to practical medicine, introducing such facts and observations constituting "recent advancements in this department" as I have been able to collect. In this way a common understanding of terms may be established, as a basis and point of departure for future reports.

Hygiene is that department of knowledge which concerns the securing and maintenance of health, whether in the individual or — as public hygiene — in a collective population. It may be studied as a science and applied as an art.

As a science, hygiene determines the conditions upon which health depends. It ascertains the necessities inherent in the physical, mental, and moral nature of man; and estimates the influence exerted on man in these departments of his nature by the physical universe acting through all its factors, as well as by the reactions of men upon each other in society.

It takes cognizance of the modifications which these necessities and these influences respectively undergo, as the conditions of men are changed by civilization, occupation, and the vicissitudes of climate, and according to age, sex, and race. It determines, likewise, the normal ratio of these various influences to each other and to the individual man, as conditions of perfect health.

As an art, hygiene provides the means of preserving health by securing the due balance of these influences and conditions. It enables us to ward off diseases, by preventing a threatened disturbance of equilibrium of conditions necessary to health; and, in this way, it forestalls her rival, therapeutics. It teaches us how to remove from the sick efficient causes of disease, and thus become an adjuvant of therapeutics.

The following subjects, among others, are within the province of hygiene:

I. All physical influences to which man is exposed and which are necessary conditions of health. Such are the atmosphere, with its changes and admixtures and temperatures; light; the soil; water, considered as an element of the soil or of the atmosphere, and as an article of diet; climate; food; clothing; buildings. Hygiene takes cognizance of all of these, in so far as they relate to the life and health of mankind.

II. The various functions and processes of the human organism, including the mental and moral, in so far as their equilibrium and undisturbed performance are important to the maintenance of health: for example, the processes of digestion and assimilation (dietetics); transpiration and other functions of the skin; exercise of the muscles (gymnastics); mental and social activity (professions, occupations, and handicrafts).

III. The manner and degree in which man's needs and susceptibilities are modified or influenced, or their relative ratio changed by age, sex, temperament, constitution, nationality, and

race; as well as by the degree of cultivation of the individual man, or the civilization of the community.

Let us consider the subject in greater detail.

I. INFLUENCE OF EXTERNAL NATURE.

1. ATMOSPHERE. — The effects of the Atmosphere, in which we live, upon health, may depend upon its composition and upon the admixture of adventitious substances.

a. Vapor. The amount of vapor of water suspended in the atmosphere has a great influence upon the vital processes of man. The more moist the air, the less freely does transpiration from the skin and lungs take place. Those substances, therefore, which are eliminated by these organs pass away less freely because of the humidity of the atmosphere, and a greater burden is thrown upon other organs; as, for example, the kidneys and liver. If the substances thus retained are noxious, as many of them are, their retention and accumulation in the blood, by reason of the retarded transpiration, will cause corresponding deviations from health. If, besides being loaded with moisture, the air be motionless, the transpiration is still less active than when winds prevail.

These considerations may, in part, explain the fact that alcoholic beverages are taken in large quantities and freely, without toxic effects, by residents of northern regions (Norway, Russia, Scotland); whereas residents of tropical, insular, or fluviatile countries are poisoned by comparatively small quantities. Alcohol is eliminated chiefly by the skin and lungs. The more rapidly this or any other poison is eliminated from the blood, the less violent are its toxic effects. When, as in a warm, moist atmosphere, transpiration, although sensible, is really sluggish, the alcohol is slowly eliminated, and the toxic effect is proportionately profound. In the cold, dry atmosphere of the north, where, as a rule, dry winds prevail, transpiration, although insensible, is rapid, and the lungs moreover are kept in

vigorous exercise. Here the elimination of alcohol by both skin and lungs is rapid, and a rapid ingestion of large quantities is required for intoxication.

But if, on the other hand, the cold be so excessive as to cause the respiration and the capillary cutaneous circulation to be sluggish, then a very small quantity of alcohol will produce a toxic effect, because it will remain in the blood, elimination not taking place. This fact has been observed by Arctic travellers, who state that persons benumbed by cold become helpless and speedily perish after taking alcohol, unless they are near a place of shelter and warmth. From these reflections we may infer that the most efficacious means of restoring a person from alcoholic poisoning would be such as should stimulate the action of the skin and the lungs, and thus promote elimination of the poison; as, for example, a hot, dry air-bath, friction of the surface, and artificial respiration.

b. Temperature. That man can exist only between certain extremes of temperature; that his highest development is reached in a mean temperature, between those of the arctic and the tropic regions; that sudden and excessive variations of temperature are apt to produce disease, — these are universally admitted facts. The tolerance of extreme heat or cold is rendered possible, partly by spontaneous modifications of function, such as increased assimilation and consumption of hydro-carbons in a cold climate, and increased activity of the liver in warm climates; and partly by voluntary modifications of clothing, and habits of life. To the medical man, the question of the comparative influence of various temperatures upon different organs of the body, and upon functions and processes, as well pathological as physiological, is of great practical importance. If, for instance, the functions of the liver are increased in activity by a warm climate, we have in this fact a reason for deciding against a warm climate for a certain class of patients. Or if, in a warm climate, the respiratory apparatus performs its func-

tions with more ease than in a cold, then we may be justified in recommending a warm climate to a large class of patients. But this is not so simple a problem as might appear from the foregoing statement. While the high temperature, and the moisture which is abundant in the atmosphere of many warm climates, are soothing to the irritated mucous membrane of the air-passages, and therefore favor its restoration to health, the relaxing effect of this temperature upon other parts of the organism may cause appetite to fail, and thus lead to a scanty supply of assimilable pabulum of which the body is in great need. Moreover, the effect of a high temperature is to favor suppuration, and to hasten destructive processes in tissues; and, if such processes have already been set up, a warm climate may simply hasten the fatal issue of the disease.

Physicians have entertained diverse opinions on the advantages of a sojourn in a warm climate for patients with pulmonary tuberculosis; and experience may be cited both for and against the practice. It has appeared to me, as the result of much observation, that the effect of a warm climate on such patients depends entirely upon the stage which their malady has reached. If there be simply inflammation of the mucous membrane, as laryngitis or bronchitis, — no destructive process having set in, and the general organism not sympathizing by decided febrile movements, — the advantages of a warm and equable climate are undeniable; and many a patient is, by removal to such a climate, rescued from a visibly impending doom. But, if destructive suppuration have already set in, the warm atmosphere will only hasten the unfavorable termination of the case. The physician often hesitates to take the responsibility of advising his patient, at a sufficiently early stage of the disease, to so radical and formidable an expedient as an entire change of residence and climate; he defers the advice until the time for it has passed. Still more frequently, the patient neglects the

advice until the moment has passed when the change might have arrested his disease.

c. Light. We infer, from the analogies of the vegetable and animal kingdoms, that free access to the light of day is necessary to the health of man. It is well known that dwellers in deep, narrow valleys, or in the lower stories of high houses in narrow streets in cities, and who seldom come under the full light of the sun, are ill-developed, and subject to many diseases of mind and body which are not observed in those who live on plains or hills, under the free light of heaven. But we may not ascribe these differences to the different degrees of light alone, to which these classes have been exposed. In the former case, impure air, scanty nourishment, and excessive labor almost always combine with insufficiency of light to produce the ill-health which we notice.

We observe the effects of a deficiency or an excess of light chiefly in the organs of vision. It is said that many infants born and reared in the cellars of Manchester are blind. Infants, if kept in a dark room and always in the same position in relation to the window, often acquire strabismus from their instinctive turning towards the light.

Excess of light, on the other hand, produces erythema, excites the nervous system, causing various degrees of cerebro-spinal irritation, even to apoplexy and death (sun-stroke) But here we have also present an excess of heat, which prevents our knowing just how much is due to light alone.

The bad effect of excessive light upon the eye is most frequently observed when the light is reflected, as from snow, or from the surface of still water. Blindness often results from constant exposure to such light. As a matter of public hygiene, care should be taken, in schools, hospitals, and factories, that the occupants be so placed that, while pursuing their avocations, they shall not be exposed to light reflected from water, clouds, or adjacent buildings into their faces, rather than upon their

work. Many a schoolboy's headache and incapacity spring from faulty arrangements of this character. And how often do we see intelligent citizens reading after their day's work is done, sitting with their faces directed towards the lamp or gas-light, receiving the full glare upon their eyes, while the printed page which they strain their vision to decipher is in shadow!

As a general rule, light excites the brain and nervous system, and accelerates the circulation; while the effect of darkness is soothing. Especially is this observed in certain diseases, as scarlatina and smallpox. On the contrary, darkness increases melancholy. And in some states of nervous irritability, as in the case of hysterical women, and sometimes in half-grown children, if the sleeping-apartment be quite dark, sleep will be broken and unrefreshing, or interrupted by paroxysms of nervous erethism; whereas a moderate degree of artificial light exerts a quieting influence. Many children waken, an hour or two after going to bed, in a paroxysm of terrified bewilderment, and scream or whimper, and do not recognize their attendants. It is difficult to pacify them. Stern measures only aggravate the trouble. A lighted lamp, so placed as to dimly illuminate their sleeping-apartment, is generally an effective preventive of such attacks of "the horrors." Patients in the delirium of typhus often suffer from light reflected into their faces, or again from too great darkness of their room at night. A sagacious attendant may infer the cause of their suffering from the tenor of their delirium.

d. Electricity. No doubt the electrical state of the atmosphere has an effect on our health, but we are constrained to admit that we know almost nothing about it.

e. Density. The density of the atmosphere affects various organs and functions. At great elevations above the sea-level, the air being rarified, respiration is difficult, and hæmorrhages easily take place. Persons predisposed to hæmorrhage should avoid great altitudes.

f. Winds. The motions of the atmosphere, constituting the winds, affect the health of man; and a region may be favorable or unfavorable for the sick, according to the prevailing winds. The peninsula of Italy, otherwise so inviting a residence, is a very questionable resort for invalids, on account of the extreme changes resulting from the prevailing winds. The *tramontane* from the snow-clad Alps and Appenines pierces the invalid with its chill blast; and, the next day, the sirocco from the burning African desert sweeps across the level sea, and wilts and scorches him, and harrows his nervous system into a restless erethism.

g. Foreign Substances. Finally, in the atmosphere may be suspended adventitious substances, capable of acting injuriously upon the organism of man. These may be gaseous emanations from the bodies, or excreta of sick persons, or minute portions of such excreta; or they may be parasites, vegetable or animal; or seminal germs of lower forms of vegetable or animal life, capable of engendering disease. It is certainly an important concern of hygiene to investigate these substances, and to learn to apply a knowledge of them to the prevention of disease. There is little reason to doubt that most epidemics are due to the suspension of such substances as these in the atmosphere. But the mere presence of these substances is not sufficient to account for the existence of the disease in each individual affected; because, since all who live in the infected atmosphere do not contract the disease, we must acknowledge a predisposing state of the system in those who do contract it. Nevertheless the destruction of the infecting substance furnishes the means of arresting the spread of the disease; and this is the province of hygiene. A few examples may illustrate this subject.

Dr. J. H. Salisbury, of Cleveland, in 1862, ascribed camp measles to the spores of a fungus which grows upon wheat-straw under the influence of heat and moisture, and which was abundant in the straw-beds of recruits in camp, who suffered

much from measles. Subsequent extensive observations during the war failed to confirm Dr. Salisbury's theory, although Dr. Woodward, of Illinois, noticed that men who slept on musty straw had a cutaneous eruption resembling measles, but not accompanied by fever or catarrh.

But, although it may not be the Puccinia Graminis which is the cause of measles, it is certain that an infection does emanate from a patient laboring under that disease, which becomes suspended in the air, and so conveys the disease to others who may be susceptible. One or two patients with measles, in a hospital ward, will impart the disease to as many susceptible subjects as may enter the ward. Surgeon Woodward states that the vapor of bromine, diffused through the atmosphere of a ward in which were patients with measles, appeared to prevent the spread of the disease to others. (U. S. Sanitary Commission Memoirs; Medical, p. 234.)

To Dr. Salisbury likewise we owe a most interesting series of observations, which seem to show a dependence of intermittent (malarious) fever upon the spores of several species of Palmella which are found in certain marshes and soils. While this theory cannot be said to have, as yet, won general acceptance, it rests on strong arguments. Certainly, however, the algæ, if parasitic, require for their development a favoring susceptibility on the part of the patient, so different is the readiness with which different persons, equally exposed to paludal exhalations, contract the disease.*

The experience of United States army surgeons, and of others, seems to show that quinine, whatever its rank may be as a remedy for intermittent fever, is, to a great extent, a prophylactic. And the recently published observations of Binz, of Bonn, show that the power of quinine to destroy fungi of lower orders, and to prevent fermentation (*i.e.* fructification of fungi), is greater than that of any other substance, except the permanganate of

* Am. Jour. of Med. Sci. Jan. 1866, p. 51.

potassa. (Binz: "Exp. Untersuchungen über das Wesen der Chininwirkungen." Berlin, 1868).

Again, epidemic diarrhœa and dysentery have, for years, been ascribed to exhalations of some kind from the excreta of patients. The observations, among others, of Surgeon B. Woodward, U.S.A., during the recent war, show that such excreta contain fungi, which also "were found on the mucous coat of the intestine." Dr. Woodward concluded that "camp diarrhœa is caused by cryptogamic formations, generated in camps and barracks, and disseminated in the air,"—a conclusion justified by the fact that measures calculated to destroy such formations put an end to these epidemics.

It has assuredly been demonstrated that Asiatic cholera, however it be conveyed from country to country, produces in each patient some element of infection whereby the atmosphere is poisoned, or fomites are constituted which cause the spread of the disease. The researches of many physicians, and especially of Pettenkofer, have shown that the excretions from the stomach and alimentary canal are the vehicles of infection. Hence Pettenkofer's rules for arresting the epidemic: that the excreta be immediately removed from the house, and treated with certain chemical agents, such as sulphate of iron, charcoal, permanganate of potash, etc.; and that clothing contaminated by them should be boiled with disinfectants, and then well oxygenated. But investigations, so far as carried, do not meet all the questions suggested by the history of cholera. Sporadic cases may certainly occur at all seasons of the year, in winter as well as in summer. Why do not the excreta convey the infection in winter, as well as in summer, just as the lymph of smallpox would do? And what element of the excreta is the source of infection? Hallier's observations, if confirmed, will answer these questions. He detected in the excreta of cholera patients a fungus found under no other circumstances in any part of the human organism or its products, and nowhere else in nature except in the blight of

the sorghum. It is this fungus, the Micrococcus, which he regards as the "choleræ contagium." Developed in the intestine, it is vomited or passed with the excreta. If the weather be warm, it fructifies after it is passed, whether it be in vessels or privies or upon the earth's surface, and sends off spores which float in the atmosphere and are inhaled by all to whom they may be wafted. But, in cold weather, although the heat of the body may keep it alive and it may cause the disease in the individual who may have received it, yet, when excreted and deposited in privies or upon the ground, it does not find an atmosphere favorable to fructification, does not send off spores into the air, and therefore the disease is not propagated. Hallier's experiments further show that those means which Pettenkofer found most effectual in "stamping out" cholera are those which most surely destroy the cryptogam; viz., the permanganate of potassa and the protosulphate of iron applied to the excreta at the earliest possible moment, and the latter, together with charcoal, freely added to sinks and privies.

If these views be substantiated, and if they comprise the *entire* etiology of cholera, then this mysterious and terrible "pestilence that walketh in darkness" is reduced to a pestiferous crop of fungi to be exterminated; and it follows that a systematic disinfecting process pursued, not only during the summer of an epidemic, but throughout the year, should finally eradicate this malady from any locality in the temperate zone.

The investigations of Lemaire and Wreden have shown that some of the lowest forms of vegetable and animal life (Monas, Vibrio, Bacterium) are found in quantities upon the walls of ill-ventilated and ill-kept sleeping-apartments, and the air becomes loaded with them; that these forms are identical with those found in the perspiration or on the bodies of unclean persons inhabiting such apartments; and finally that they have been supposed to be the cause of typhus.

2. WATER may be considered:—

a. As an element that contributes to the composition of the atmosphere. The salt water of the ocean covers a large part of the earth's surface, and its vapor holds suspended, salt, iodine, and probably bromine. The temperature of the sea atmosphere is more equable than that of the land. We have yet much to learn of its peculiar action on the human system. It has a not wholly undeserved reputation as a means of preventing scrofula and phthisis.

b. As an ingredient of the soil, fresh water powerfully affects the health of man. A moist, undrained soil constitutes a favorite feeding-ground for cholera, as is proved by the statistics of the Boards of Health of New York (vol. xi., 1868) and of London; and Dr. Bowditch shows that it favors the development of phthisis pulmonalis. It certainly tends to produce rheumatism, although humidity alone is not to be reckoned an essential cause of this disease. (U S. Sanitary Commission Memoirs; Medical, p. 270.)

These facts being conceded, drainage of the soil becomes an important concern of hygiene. To a limited extent, this is within the power of each individual householder, but, in general, it is a subject rather of public hygiene. It includes the disposal made of the refuse and sewage of cities, and the question how far this may possibly return in the drinking-water used by the people, or may linger about wharves and docks, and give rise to disease. In rural neighborhoods and farming districts, tracts of land held by many different owners frequently need, in the interests of all, a well-planned and uniform drainage, such as individual owners could not agree to construct or keep in order. There should be, for this purpose of public hygiene, in each county or township, a board of supervisors having charge of drainage, with power to lay out drains and to use private property for this public good, just as land is taken for public roads and streets in the interests of the public. Were this properly

done in the suburbs of New York, millions of dollars would be added to the value of real estate by the increased healthfulness of localities now infested with malaria.

c. As an article of diet, water should be pure; that is, free from admixtures of inorganic salts or of organic matter. The former may tend to produce goitre, intestinal disease, renal and vesical calculus. The organic matter may give rise, according to its character, to continued or periodic fever, or to diarrhœa and dysentery. In all obscure sicknesses, especially if endemic, the water used by the patient or the population should be most carefully examined. Where organic impurities exist, and no other water can be immediately procured, the addition of a few drops of a solution of permanganate of potassa to each gallon of water is a wise prophylactic measure.

3. SOIL. — The peculiarities of that portion of the earth's crust which we inhabit must exercise a great influence upon health. This is modified by its geological and mineralogical composition, its electrical relations, topographical configuration, and the degree to which it is traversed by streams of water, subterranean or superficial, and covered by vegetation. The consideration of these topics brings us to the subject of climate.

4. CLIMATE is justly regarded as the chief cause of the differences between the races of men. Besides this broad view of climate in its relation to races, we are to study the effect of change of climate upon individuals of each race as predisposing to disease.

And here we must study also the changes of diet and habits which are inseparable from a change of climate. It is a most important question whether diseases that are endemic in certain localities, as bilious, remittent, and yellow fevers in certain cities and regions of the Southern States, and which attack, most surely and with greatest violence, the unacclimated immigrant from the North, may not depend, to a great extent, upon some

habits of the individual or of the community, such as, however objectionable, might be practised with impunity in other places, as, for example, at the North. In the city of Nassau, N. P., bilious fever prevailed every summer, until an ordinance was enforced requiring that every particle of vegetable matter, such as fallen leaves, fruit-skins, etc., should, every morning, be removed from streets, yards, and the entire surface of the city. After this, the city was free from fever for many years. The exemption of New Orleans from yellow fever during the three years of military government from 1862 to 1865, while hundreds of thousands of unacclimated Northerners in a peculiarly susceptible condition were passing through the city, and while other Gulf cities were severely visited by yellow fever, conclusively demonstrates that the disease is preventible. (Sanitary Commission Memoirs; Medical, p. 237. Dr. E. Harris.) The question of necessary changes of diet, to correspond with changes of climate as well as of occupation, is very important.

Growing out of the question of the relation of climate to the healthy man, that of its relation to the sick presents itself. This must be studied with reference to special groups of diseases, and is of great difficulty, inasmuch as the peculiarities of each patient must be taken into account. The following may perhaps be proposed as a general rule: A patient resident in a temperate climate, who finds relief during the summer at home, will, other things being equal, be helped by a sojourn in a warmer climate during the winter. But if, at home, the summer heat prostrate him, he will suffer injury from a warmer climate. Inattention to this dictate of common sense sends one consumptive to gasp his life away prematurely in the atmosphere of Florida, which to him is stifling, while to another it may be balmy and life-giving.

But climate is not to be considered with reference to temperature alone, nor to moisture alone. An equable temperature and dry atmosphere would surely be regarded as favorable con-

ditions for a rheumatic patient. The climate of New Mexico presents them in an eminent degree. Yet in this region rheumatism is extremely prevalent, — more so than in foggy Nova Scotia; a fact ascribed to the remarkably active electrical condition of the atmosphere, and the quantity of ozone which it contains. The latter character would make it, I venture to suggest, an unfavorable climate for phthisical patients, although it has been highly recommended for such, on the ground that consumption does not originate there. It appears, however, that soldiers quartered in New Mexico suffer much from catarrhs and bronchitis as well as rheumatism; and, as to the exemption of the natives from phthisis, the vital statistics of an unreclaimed wilderness are not much to be relied upon, especially where they relate to a malady which, like consumption, affects chiefly those who have come under the restraints, excitements, and privations of what we call civilization.

Such are, in brief, the influences belonging to external nature, to which man is necessarily subject. We come now to consider those which spring from his natural or acquired wants, physical and mental, and from his relations with others of his race.

II. INFLUENCE OF MAN'S RELATIONS.

1. DIET, comprising solid food and liquid, or beverages, is to be studied first as to its constituents. Animal chemistry teaches us to seek in our food a source of supply of all the proximate principles found in the tissues of the body. It is possible that our instincts may be correctly interpreted as calling for certain substances not components of the body, but which, acting perhaps by catalysis, facilitate the process of digestion and assimilation.

a. Food. Our appetites crave a considerable variety of food, as regards consistency, composition, and flavor; and clinical experience shows that the digestive organs fail of healthy action if this variety be withheld. Within the limits determined by

the composition of the body, diet must be varied according to climate, occupation, and exposure; as the record of public hygiene, and especially that of armies and prisons, have well established. The art of cooking, or of reducing the crude food to forms most palatable and most assimilable, is one of the most important branches of this department of hygiene.

Besides the necessity of modifying diet according to climate, and to the occupations and exposure of a race or body of men, we recognize a similar necessity in reference to the idiosyncrasies and peculiar circumstances of individuals, and especially if they be sick.

Finally, it comes within the scope of hygiene to study the production of food, with a view to improve its quality and quantity, and its preparation for the market.

b. Beverage. The only liquid which is strictly a beverage — quencher of thirst — has been considered under the title of *Water.* Other 'beverages' are liquid food, such as milk and broths; or are stimulating drinks, such as coffee, tea, cocoa, wines, fermented and alcoholic liquors; and these, together with the spices used as condiments (excepting common salt, a constituent of the body, and, as such, a necessary article of food) are of the nature of drugs, and come under the laws which govern the use of drugs.

Secondly, not only the quality, but also the quantities, of food to be taken, and the times at which different articles should be taken and how frequently, are questions of hygiene, and they must be variously answered according to the age, sex, constitution, and circumstances of the individual concerned. In the case of a patient, they come under a special department of dietetics,— that relating to the sick, — than which no branch of hygiene is more important. It includes questions of the hygienic management of patients suffering from errors of diet, such as repletion or starvation, general or special, and of each, in every variety of detail.

c. Impurities. Finally, the subject of diet includes the investigation of impurities and adulterations to which our food or drinks may be exposed, whether from accidents of growth or disease, from careless or unskilful preparation, or from the dishonesty or malice of man. Farinaceous food may be unwholesome from parasites upon the grain, from fungi developed in the meal as the effect of dampness and heat, or from adventitious substances added in the grinding. Coffee, tea, wine, and milk are often and most variously adulterated. Meat may be unwholesome from disease, or tainted from long keeping, or deleterious because too recently killed. And vegetable food or water may convey to our intestines the ova of the Tænia Solium and probably of several other entozoa; and the flesh of the swine may be the means of introducing into our bodies the scolices of the Tænia and the Trichina spiralis; and perhaps the flesh of the sheep may impart to us the scolices of the Tænia echinococcus. These facts, and the means of avoiding these parasites, come within the province of HYGIENE PRAEVENIENS. With the question, how far she can aid in removing them after they have been introduced into the intestines, she deals in her capacity of HYGIENE ADJUVANS.

2. BUILDINGS. — The subject of buildings, including dwellings and edifices devoted to purposes of business or manufacture and to educational, religious, or social uses, is of great importance in a hygienic point of view. The position, size, and plan of the buildings in which we pass a great part of our lives determine the atmosphere in which we live; and we have seen how directly health depends upon the purity of our atmosphere.

The apartments must be of adequate size and thoroughly ventilated, with due regard to the number of inhabitants and their occupations. They must be well lighted. Care must be had that they do not receive vapor of water, or gases from decomposing matter, arising from the soil beneath or from vaults

or cellars. The soil must be effectively drained; cellars and vaults kept clean and well ventilated, and their walls frequently cleansed of fungi which are apt to flourish upon them. Waste-pipes for refuse water from bath and closet must be provided with stench-traps, and must also be ventilated below the traps, to the end that gases generated in them or arising from sewers may not, by their pressure, force their way through the traps into the building, but be conducted into the outer atmosphere. The walls of chambers constantly occupied, and especially by the sick, should be frequently cleansed and washed; microscopic research shows that organic emanations from the human body attach themselves to the walls, and fructify there, becoming a cause of disease. Wall-paper should be often examined, lest the paste with which it was applied, being hygrometric, have become moist and mouldy, and a cause of disease. If so, it should be removed. Arsenical wall-paper should never be used.

If the occupants of a house have especial tendencies to pulmonary disease, carpets should not be used. They hold quantities of dust, which is set in motion in the atmosphere by every footfall; and they give off continually fragments of woolly fibre which irritate the lungs. The customary mode of heating houses by hot-air furnaces or cast-iron stoves is less desirable than that by hot water, or low-pressure steam-heating apparatus; for the reason that, where the former are used, the air to be heated is generally brought into contact with red-hot iron, whereby the particles of organic matter in it become charred, and their gases irritate the throat and lungs. Moreover, these arrangements always give off noxious coal-gas.

Even the selection of colors for the furniture and decorations of a dwelling or a public hall should be studied from a hygienic standpoint. A want of harmony in figures and colors is a source of discomfort and irritation to the mind. Confused and intermingled indefinite figures of many lines and angles produce vertigo in the sensitive brain, and cause the eyes to ache.

Crimson and the reds promote genial conversation, and are appropriate for the parlor. Green disposes to cogitation, and belongs to the library and study. Blue cools the heated brain, and soothes the mind, favoring repose; its place is in the bedroom.

The location and disposition of buildings deserve much attention. Streets should be wide enough to admit of a free circulation of air, no matter from what quarter the wind blow. Shade-trees on their margins, though pleasant, are objectionable if, as often happens, they so overshadow the street as to prevent the surface from being readily dried and sweetened by sunshine.

The noxious fumes from neighboring factories, etc., often make dwellings and offices quite unhealthy. Legislation should empower local authorities to do away with nuisances of this kind.

3. Clothing. — The hygienic consideration of clothing includes the questions of sufficiency, of adaptedness to the exposure and occupations of the wearer and to the climate, and of style — as protecting and yet not impeding the full use of limbs and muscles. Poverty, inadvertence, and the caprices of fashion lead to insufficiency of clothing, whether of the whole body, or of some part of it only; and the sensations of the sufferer are not always to be depended upon as indications of the fact.

Clothing must be adapted to climate, and to the occupations and idiosyncrasies of the wearer. Cotton and linen fabrics do not readily absorb moisture; if saturated, they become very cold, and impart a chill to the body. They are not suitable, therefore, to be worn next the skin, at least of persons who from their occupation are liable to be wet, or from the humidity of the atmosphere, or from perspiration. Such persons should wear woollen fabrics. Sailors, stokers and firemen, and those who are liable to be exposed to currents of air when sweating freely, or those who are exposed to the heavy dews of tropical

regions, find advantage in wearing thick flannel garments. And under all circumstances, those who perspire freely should wear flannel. Children, therefore, — who as a rule sweat profusely in their sleep, and are liable, from the evaporation of this moisture, to become chilled during the night, while at the same time the atmosphere is growing cooler as night advances, — should wear flannel night-gowns, even if they tolerate no other covering. A shirt or sack is not enough: the abdomen and limbs need especial protection. I am sure that æstival and autumnal diarrhœa and dysentery would be comparatively rare among children in our country, were this simple practice adopted. For a similar reason, little children should always wear, in the daytime, flannel drawers or breeches, even if they can endure no other nether garment. For children will sit on the ground, and what care they whether the spot on which they sit be wet or dry? Clothing should not, by shape or tightness, retard circulation, hamper respiration or muscular action, nor impede any function of the body.

4. THE CARE OF THE SKIN may properly be considered in this connection. The skin is protected from injury by clothing. It must be freed from impurities from without, such as dust, etc., and from the excreta of the body eliminated by the sweat-glands and the sebaceous follicles. Let us not forget that the operations of bathing, etc., by which this cleansing in accomplished, exercise a general influence upon the health of the body by the abstraction of heat, and by a kind of shock. Hygiene aims to attain cleanliness with a minimum of shock. The operations of adapting the "shock" to the modification of functions for specific purposes relating to health, belong to a special branch of medicine, —hydro-therapeutics.

The skin may be infested with animal or vegetable parasites, which give rise to or complicate disease. Pediculi of different species inhabit different localities. The Acarus finds his home

near the itch-vesicle. Favus and porrigo have a peculiar fungus; and erysipelas is now thought to depend upon the presence of a vegetable parasite, which is instantly destroyed by the hyposulphite of soda. The Pulex penetrans or chigoe transfers itself from decaying leaves to a subcutaneous home in the foot or hand. Hygiene concerns herself with defences against these tenants, or with actions for their ejectment.

The care of the skin, hair, and teeth is closely connected with the question of the proper supply and variety of food. If this be deficient, these organs soon show the fact by eruptions, decadence, and decay. In this connection, too, cosmetics and their effects upon health may be studied.

5. SOCIAL HABITS AND RELATIONS of mankind are of greatest hygienic importance. The relative longevity and health of the married surpass those of single men and women. Life should be an admixture of labor, care, recreation, and amusement; and variety should be introduced into each department. This is indispensable to the health of both young and old, and belongs equally to private and public hygiene.

That occupations have a direct bearing upon health, appears from tables of longevity, which show that the average life of farmers is more than twice that of physicians.

Mankind should duly employ the physical, intellectual, and moral powers. The tendency of the farmer and mechanic is to occupy the body too exclusively; that of the professional student, the mind. Women are too generally left without encouragement or opportunity for the systematic employment of either. Yet they especially need, even in girlhood, systematic exercise and development of the muscles of the body and limbs as a preparation for the trials of maternity. This muscular development of girls should be made a special duty of parents until the evils resulting from false education, and which have made miserable the present generation of women, shall have been

corrected. Not the arms and hands alone, but also the lower limbs, and the abdominal and dorsal muscles, should be made strong by vigorous exercise, as in the case of boys. Mothers must forego the wish to have their daughters demure and quiet little dolls up to their fifth year, and, after that age, premature, dwarfed young ladies, if they desire to rear them to be healthy women, strong enough to bear and care for a healthy offspring.

It is a common error to suppose that housework is a sufficient and suitable exercise for a woman. It is not sufficient, for it brings but few muscles into requisition: it is not suitable, for it is carried on in close apartments, and in an atmosphere contaminated with dust, if she be sweeping, and with vapor and foul exhalations, if she be washing dishes or clothes.

Hygiene studies the dangers to health which beset every occupation or profession, — those arising from exposure to the elements, in the case of the sailor, farmer, hunter, etc.; those from confinement to the desk, in the case of the lawyer, student, accountant; those from excitement of the mind and the sense of greed, in the case of the stock-broker, speculator, and gambler; those to which workers in lead, mercury, arsenic, phosphorus, and tobacco are exposed; or stone-cutters, needle-grinders, metallurgists, and chemists. Two examples may be given: —

The introduction of the sewing-machine has given a new employment to many women, who sit, day after day, working the machine, which requires much effort in the alternate motion of the limbs. It has been stated that women thus occupied suffer from diseases of the reproductive organs and their appendages, — catarrh of womb and vagina, and irritation and excitement of pudenda, so excessive as to compel them to give up work. Hygiene might have dictated the remedy for this evil, which, in fact, self-interest devised; viz., the substitution of small engines, driven by compressed air, for the limbs of women, as means of propelling the sewing-machine.

Workers in electro-plating are obliged in the course of their work to plunge their hands frequently into a solution of cyanide of potassium, which, if there be the slightest abrasion of skin, and even sometimes if there be none, causes excessive pain, and produces obstinate and very painful ulcers. As a consequence, valuable workmen are often compelled to be idle for weeks at a time, which diminishes the profits of the trade. In 1864, I was requested by a manufacturing company to suggest a remedy for this difficulty, for which they had taken advice from many sources to no purpose. Upon the hypothesis that the cyanide of potassium is decomposed by action on the skin, leaving nascent pure potassium or its oxide in contact with it, from the caustic action of which the ulcers resulted,—an idea supported by the appearance of the ulcers,—I advised that each workman have beside him a solution of tartaric acid, or a vessel of vinegar, into which he should plunge his hands immediately on removing them from the bath of cyanide of potassium. This advice was followed, and, at the expiration of a year, I was informed of the great satisfaction of the workmen with the result. They stated that they had no more ulcers, and that the pain in abrasions, etc., was instantly and permanently removed by the acid bath.

III. PRACTICAL APPLICATION.

From this cursory view of the province of hygiene, we turn to the question of its relations to practical medicine. What has the physician, in his care of sick people, to do with hygiene, and how may he apply his knowledge of it?

We have seen that hygiene investigates the influence of nature upon man as maintaining and modifying his health. It comprehends every material external cause of disease, except such as exist in diseased functions and tissues of the body itself. It regards not only material external causes in which diseases originate, but also such as perpetuate it when already existing.

Manifestly the removal of such causes is the first duty of the physician in the care of the sick. He is, then and thus far, a hygienist. Whether, therefore, the material external exciting or perpetuating cause of disease have been or be impure atmosphere, or lack or excess of light, heat, moisture, or electricity; or the presence of adventitious substances in the air; or impure water; or a badly drained or noxious soil; or food or drinks improperly selected or prepared, or poisoned by foreign substances; or parasites; or ill-constructed, poisonous dwellings; or inadequate clothing; or unhappy relations; or an unwholesome occupation, — whether these causes, having been active, have brought on the sickness, or, being still active on a person who is ill, are keeping him so, the physician's first business is to remove, mitigate, or counteract them, so far as he may. In so doing, he acts through the means afforded by the physical and chemical sciences, governed by the general principle, "*Causa sublata, tollitur effectus.*"

If, on the removal of the material external cause, the effect do indeed pass away, then is the physician's mission accomplished. If, the material external cause being removed, the effect be slow to disappear, recovery may be hastened by the specific stimulus of the appropriate drug. Or, if, — as happens too often, — the material external cause being removed, the effect continues, because tissue and function have been so profoundly modified as to have taken on a new life which is destructive and tends to involve the whole organism in dissolution, then there is no hope for the patient, save in the introduction of some new positive influence which shall again and favorably modify the life of tissue and the performance of function. These special stimuli, or drug-influences, belong to the domain of therapeutics, and come under its laws.

The physician who recognizes no law of therapeutics, who has no guide except crude empiricism in the selection of remedies for a case, is likely to depreciate the importance of drugs,

and exalt unduly that of hygiene, — to recognize an external material cause of disease when none can be found, and to institute measures for the removal of this hypothetical cause.

On the other hand, we, homœopathic physicians, having a law for the selection of drugs which approves itself in our daily experience, are in danger of unduly extending the domain of this law, and of looking with a jealous eye, or too carelessly, upon hygiene and the expedients to which it directs us. Let us avoid this danger. We shall have abundant opportunity to apply our law of cure after we shall have removed every material external cause of disease within our reach. And, besides, if the progress of science should enlarge the scope and capabilities of hygiene, and teach us to prevent without drugs what we now cure by means of them, shall we not be fulfilling, then as now, our vocation — to take care of the sick?

Confounding hygienic and therapeutic measures, we are in danger of certain misconceptions which deter us from employing hygienic measures for the good of our patients. Allopaths have been wont to use external applications as revulsives, counter-irritants, etc., to act upon some supposed or real internal malady, thus "doing evil that good might come." We have very properly protested against this practice as painful, mischievous, and ineffectual; and this has caused in us an aversion to all external applications. Let us not carry this aversion beyond therapeutics into the realm of hygiene. Few homœopathists would object to removing Pediculi capitis with a fine-tooth comb. Why not, then, remove the Acarus scabici with grease, it being an admitted source of irritation and propagator of the disease? Why not destroy the fungus of erysipelas and of favus with hyposulphite of soda? We admit that these diseases require also a constitutional drug-treatment for their eradication. But, be these parasites cause or consequence, they tend to prolong and increase the disease.

Their removal is a pure hygienic measure, and has no reference to the law of cure.

Or, if we may remove the pediculus which has crawled to our scalp from that of our untidy neighbor, why shall we not expel, as best we can, the tænia, whose scolex we may have received with the flesh of the swine? And, as we cannot remove it with comb and water and forceps, why not expel it by using a substance (like pumpkin-seeds) which is noxious to the parasite and harmless to us? This measure is not, in any sense, one of therapeutics, affecting our law of cure, but one of hygiene alone. The only practical question for the physician is this: Will the patient be more injured by any collateral effect of the vermifuge than the presence of the worm? An ulcer or granulating surface may discharge an acrid pus, offensive or destructive to the patient, and in which vermin breed. It is a cause of irritation, and both perpetuates the old disease and originates a new. It is the business of therapeutics to induce a more healthy action of tissues, so that the secretions shall no longer be thus ill-conditioned and morbific. Meanwhile, however, hygiene, intent on removing external material causes of disease, bids us remove the discharge, wash the wound, and treat it by any suitable application which might neutralize the acridity, kill the vermin, destroy the offensive odor, and thus obviate the perpetuation and reduplication of disease. Let us apply this view to a bladder filled with retained urine which the patient cannot evacuate. Therapeutics institutes measures whereby the insensibility of the vesical walls to the stimulus of the urine shall be cured, or the spasm of the sphincter abated, or the muscular fibre awakened from its paralysis. Meanwhile, the distended bladder is a source of suffering, and finally provokes irritation and fever, and, at last, may endanger life. It is a hygienic measure, though a surgical operation, to which we resort, when, in such a case, pending the operation of our therapeutic measures, on which we depend for a cure, we introduce

the catheter, and thereby remove the external material cause of the impending secondary disease. Is not the case the same when the rectum, full of impacted fæces, becomes a seat of irritation, with which the system speedily sympathizes? While we institute measures for the radical cure of the disease in which the impaction originated, hygiene bids us remove the impaction. If it be not too high in the rectum, we accomplish this with a spatula, as we should remove a splinter of wood from the flesh with a forceps. But, if it be beyond reach of such mechanical means, is it not the same process, required on the same grounds to which we resort, if we avail ourselves of the indirect means afforded by an irritant to the intestine, arousing it to expel the impaction,— in short, by a purgative of whatever kind? Shall we not be in error, if we allow our just abhorrence of the derivative and revulsive therapeutic use of such surgical and medical means by allopaths (so far surpassed by our more direct and exact therapeutics) to deter us from their proper, although rarely required use as hygienic agents?

It is of vital importance to us, as members of a medical school which, thankfully accepting all the aid which collateral sciences can give us, claims to possess, above and beyond other schools, a sure and definite law for the selection of drugs, that we should have clear ideas of the nature of cases, as to whether they demand the employment of drugs or not; and that we do not allow ourselves to resort to and depend upon therapeutics in cases which belong to the domain of hygiene,— cases in which there is a material cause of disease, external to the body in its origin or location, and which we can recognize and remove.

IV.

ATMOSPHERE AND WATER.

BY N. D. TIRRELL, M.D., ST. LOUIS.

A FULL discussion of the hygienic influences of topography would naturally range itself under five general divisions,—atmosphere, water, regions, soil, and climate. This paper will treat of the first two of these divisions only, but it may be well to preface it with a synoptical view of the whole subject of which they form so important parts.

I. ATMOSPHERE.—The inquiry into the hygienic influences of the atmosphere includes an examination of the differences between that of the seaboard and of the inland portions of a continent; between that of mountainous regions and of flat country, like our prairies and the plains of Southern and Central Europe; and a consideration of the atmosphere of cities in general, and of different portions of them. The atmosphere is modified also by the influences of marshes or extensive forests, either in the immediate vicinity or in the direction from which the prevailing winds blow, as well as by emanations from factories. Further, this topic includes ventilation, and the action of disinfectants and deodorizers.

II. WATER.—The influence of the water of the country generally should be considered, and that of the water used in cities in particular. The extent of the influence of impure water on the health or on the cure of disease, and its agency in epidemic

and endemic diseases, is not to be overlooked. And it is important to inquire into the agencies by which water is contaminated, and the extent of their prevalence.

III. Region. — What influence is exerted by inland or maritime regions, elevated or low?

IV. Soil. — The effects exerted on health by sandy, rocky, clayey, and alluvial soils should be an object of inquiry; that of soil recently broken for the first time, and such as is exposed to inundations, or is saturated with water by rains or rivers.

V. Climate. — Lastly comes the inquiry what influence the climate may have on life, health, and disease, irrespective of that exerted by the atmosphere, water, region, and soil. Extremes of temperature, sudden and great changes of temperature, the effects of perpetual summer, and of arctic winter, are subjects of especial inquiry here.

I. ATMOSPHERE.

Chemistry teaches us that the atmosphere is composed of two gases, nitrogen and oxygen, mechanically mixed, — not chemically combined, — in the proportion of about four parts by weight of nitrogen and one of oxygen, with about six thousandths of carbonic acid, and aqueous vapor varying from five thousandths to the point of saturation. The quantity of water depends generally upon the heat — and consequently the volume — of the air. Any other ingredient than these is considered, chemically speaking, an impurity.

The oxygen is the active, life-supporting material. The nitrogen is the diluent of the oxygen, serving to moderate its intensity; the carbonic acid answers as the great supporter of the vegetable kingdom, and, through that, of animals. The watery vapor answers the purpose of keeping animal and vegetable tissues in a soft and plastic condition, and also of preventing the too great evaporation of the fluids of animal and vegetable organism.

An absence of any one of these constituents, or wide departure from the normal proportion, would be eventually destructive of animal and vegetable life as it now exists. Such is the chemist's view from his standpoint; but some physiologists and physicians — homœopathic especially — have a suspicion, almost amounting to a belief, that an atmosphere composed of these ingredients *only*, would not support life as we now find it. They believe that there is an infinitude of material and vital forces pervading the atmosphere, such as electricity in its many forms, light, and the vital forces of the vegetable and animal kingdoms. They believe — *almost* — that these forces permeate the chemical constituents in a harmonious proportion, and maintain life in a manner designed by the Creator; but, when they are mingled and mixed in an abnormal manner, or, in other words, when the harmonious proportions are disturbed by local or other causes, the dyscrasy is the source of disease — epidemic, endemic, and general — and premature death.

The bountiful Creator has ordered that the mere chemical constituents are never disturbed naturally, or, if for a moment disturbed, the disturbance is confined to very narrow limits; and that this disturbance is soon adjusted by the innate properties of these ingredients. For example, the variation of the proportion of oxygen, nitrogen, and carbonic acid, never exceeds a certain limit, appreciable only to the delicate apparatus of the chemist; this disturbance is soon rectified either by the law of the diffusion of gases, or the carbonic acid is soon absorbed by water or plants. Thus the air from the highest mountain-top, from the sandy deserts, from deadly marshes, from the most densely crowded cities, and from the most infected hospitals, is, in its chemical constituents, almost absolutely the same.

Other substances are found in the atmosphere in small quantities, which are to be regarded as impurities; for example, hydrogen and ammonia. These do not, however, exist in proportions detrimental to health, as they soon enter into new combinations,

and their injurious influence is thereby neutralized. We must then, in our search for the deleterious agents in the atmosphere, look for something else, and leave its chemical constituents for the material and vital forces that are believed to permeate it.

We have been speaking of the atmosphere as a whole. It is adapted in all localities, as far as we know, to the maintenance of the life and health of the inhabitants of those localities. This is made quite probable, if not certain, by the tables of mortality of life-insurance companies. It would appear from these that the mortality of one part of the planet does not differ materially from that of another; or, if it does differ, the causes must be sought in the differences of social condition. The experience of life-insurance actuaries in the United States does not differ materially from that of those of Europe.

But we do not propose to enter upon the discussion of the impurities of the atmosphere as a whole, but of localities where many individuals are collected, and where the air is contaminated by respiration and perspiration. It has long since been known that the air of close sleeping-rooms, or that of crowded assemblies, of jails and of hospitals, is vitiated by the presence not only of carbonic acid, which is comparatively harmless, but of floating organizations, such as Vibriones, Bacteriæ, and the like, which are developed with astonishing rapidity, and exert their poisonous influences, when taken into the system through the lungs, or by other means. For many years the microscopists have been at work; and they think that they have detected, in the excretory matters of the patient, the cause of many diseases. It is impossible, in the brief space allotted to this portion of the report, to dwell upon this point; though we may say, in passing, that the subject is intimately connected with that of spontaneous generation, the discussion of which has been recently renewed by discoveries of the savans of England, France and this country. With this brief remark, we proceed to the subject of ven-

tilation, repeating once again that the atmosphere as a whole is invariable, — the same life-giving, life-sustaining element.

By *ventilation* we understand the art of supplying an enclosed space with pure air of a proper temperature, and containing a normal proportion of aqueous vapor. We shall restrict ourselves to the ventilation of dwelling-houses and public buildings.

The subject of ventilation of dwelling-houses, hospitals, school-houses, and other public buildings, has not been exhaustively examined by scientific men. They have done much, it is true, though the results have not been of great practical importance. Architects, builders, and manufacturers of heating apparatus, have done more in this country within the last thirty years than all the scientific men have accomplished. The early conditions of the problem — merely that impure air should be withdrawn from the apartments of buildings, and pure air substituted — were easily satisfied. In those parts of Europe, where the subject of ventilation had occupied the attention of scientific men, the atmosphere was uniformly mild; consequently the air to be supplied did not require warming. So the apparatus devised was sufficient for all occasions that obtained there. It was simply to carry ventiducts above the building, with their apertures directed towards the current of the wind. Thus a current of pure air was forced throughout the building, and the impure air removed by displacement, exactly upon the principle of the wind-sails for ventilating ships, which have been used for many years. This apparatus was amply sufficient for ventilating churches, hospitals, theatres, halls, dwelling-houses, and all places that did not require at the same time to be heated. But this new condition — of heating, and consequently of moistening the supplied air — entirely changed the problem. It has become extremely difficult, and up to the present time insolvable. It was found that, in school-houses in which children were confined for five or six hours with little or no physical exercise, their feet became cold, being in a foot-bath of cold air from the ventiducts,

which keeps near the floor, while the upper parts of their bodies were exposed to a much higher temperature. This, of course, was extremely prejudicial to health. This method of ventilation was consequently soon abandoned. Numerous schemes to obviate these difficulties were devised, some of which appeared so perfect that each in turn was declared to be the great desideratum; but, in practice, all were found defective. We are not aware that any system of ventilation has yet been invented which perfectly fulfills the conditions required in such school-houses as have been and are now being erected in this country. Besides removing the impure air and supplying pure, the air should be heated, and, as a consequence, supplied with aqueous vapor; otherwise the air, increased in volume by passing over hot iron, acquires an increased capacity for moisture. If this be not supplied artificially, the drying-power of the air robs the body of its fluids. The loss experienced by the blood causes headaches, congestion, and fever. Again, the temperature of the room should be equable; never higher than 70°, or lower than 65°. This is suggestive of some automatic arrangement by which the supply of fuel or draft should be regulated. Upon the whole, the problem is the most difficult in the whole range of hygiene. That it will be solved is quite certain, the more so as some of the best minds — and American minds, too — are bringing all their energies and large experience to the solution.

Closely connected with this subject is that of dwellings for the poor. The horrors of tenement-houses, and of other dens in which the poor are compelled to live, have been the theme of many pens; but, up to this time, little or nothing has been done in the great cities of this country to provide well-ventilated well-lighted, and convenient houses for the poor, with but one family in a house, which is thus made solely responsible for its condition. It is quite probable that nothing will be done by individual exertion, because it does not "pay." And perhaps nothing will be done by the governments of cities under the

present system; but we have strong hopes that something may be accomplished by societies organized for this especial purpose. Something was attempted in England a few years since; much was promised, though but little was actually accomplished. Many of the so-called "model-houses" are but models of what should be avoided, not imitated. The houses are, in many cases, built back to back in long rows, thus preventing ventilation and lighting. Clothing and food are kept in dark closets; water-closets are placed under the staircase, wherein not a ray of daylight has ever entered. The buildings in many cases are so high that but few take the trouble to carry down the refuse waters, or, indeed, to bring up the water necessary for washing. Filth of every imaginable description is collected in and about the house, because it is nobody's business to keep the premises clean. Added to all this filth, want of ventilation and light, there is a heat of 80° to 90° at midnight, and, too often, impure water. Such model-houses built for the poor are, of course, the radiating points of disease. Their inmates are in the greatest degree of receptivity of contagion. These dens are very numerous in our American cities, — holes wherein cholera loves to hide, and to steal out at midnight or early morning to seize its prey.

Disinfectants. Since the advent of the cholera, the attention of the medical faculty has been directed more or less to this subject. It is well known, and not denied by the allopathic school, that their treatment of cholera has been very far from successful. For this reason they have directed their efforts to the prevention of the approach or spread of the cholera by hygienic measures. And so successful have their efforts been, that they claim, and with reason, that the cholera is entirely controllable by proper remedial measures. When hygienic measures have been generally and vigorously applied, the cholera has not appeared, or, if present before, it has proved much more controllable. Next to the removal of filth, and the consequent

supply of fresh air, disinfectants have been their main reliance. Chemistry has put forth all its efforts to discover and invent new ones, and with much success.

Dr. Henry Letheby, Health Officer of the city of London, has recently made a report upon the subject, which, perhaps, sums up all that is known up to the present time. The several disinfectants which he has largely tested are the following; viz., 1, chlorine gas; 2, chloride of lime; 3, carbolate of lime; 4, carbolic acid; 5, chloride of zinc; 6, chloride of iron; 7, permanganate of potash; 8, animal charcoal; 9, heat. "Each of these disinfectants," he says, "has its own peculiar value, and may be used on certain occasions in preference to any other."

1. *Chlorine gas* he recommends, because, being of a very diffusible nature, it is best suited for the disinfection of places that cannot be easily reached by other disinfectants. Dr. Letheby has largely used it for disinfection of church vaults, where the atmosphere has been charged with the offensive and dangerous organic vapors emitted from the decaying contents of the coffin to such an extent that the workmen could not enter the vaults with safety. He recommends it also as the best for the disinfection of rooms when persons have been sick with fever (typhus), scarlet fever, smallpox, or cholera. Homœopathists will by no means assent to this view, as but little effect could be expected from our remedies in an atmosphere pervaded by chlorine. It is unquestionably useful in purifying unoccupied places, where cases of the diseases above mentioned have existed. He generates the gas by pouring about half a teacupful of strong hydrochloric acid upon about a teaspoonful of the black oxide of manganese, the mixture being made in a teacup.

2. *Chloride of lime.* — The use of this as a disinfectant is as old as this century. At the first advent of cholera in New York, in 1832, the Inspectors scattered it largely upon the

floors of the houses occupied by the poor, and also in the cellars and yards; and in some cases it was used with water for washing the wood-work and the floors of rooms. In all these cases the result was very satisfactory; and, on account of its cheapness, it promises to become the favorite disinfectant. We must protest, however, against the use of it in the sick-room where homœopathic remedies are in action.

3. *Carbolate of lime* has been used where the bleaching property, or the smell of the chloride of lime, is objectionable; though the smell of the carbolate, to our mind, is much more offensive than that of the chloride, and for this reason it is inapplicable to the sick-room. It has been used by dusting it over the floors of rooms and cellars by means of a dredger; but as a disinfectant it should not be used with the chloride of lime, as each counteracts the disinfecting properties of the other. The advantage of the carbolate of lime is in its continuous action, and its not destroying the color or texture of clothing.

4. *Carbolic acid* has been used as the sole agent of disinfection for privies, drains, sinks and sewers, and for the public roads. For this purpose it has been poured undiluted into the place to be disinfected; but for roads it may be diluted with 2,000 times its bulk of water, and sprinkled by the means of a water-cart. It was observed that the usual decomposition of sewage was arrested by its use.

5. *Chloride of zinc* (Sir Wm. Burnett's Fluid, or, as it is sometimes called, Drew's Disinfectant) is well suited for disinfecting the dicharges of sick persons, but is hardly applicable to any other purpose. Its smell should banish it from the sick-room.

6. *Chloride of iron* is applicable in the same manner as the chloride of zinc, and is only suited for the disinfection of the discharges of the body.

7. *Permanganate of potash.* — Dr. Letheby says this is only suitable for the disinfecting of drinking-water; for, not being

volatile, and being very slow in its action, and not intense, it is not available as a common disinfectant. Its non-volatile properties would probably recommend it to the homœopath for the use of the sick-room; but, for the disinfecting of water for drinking purposes, we must protest: the circumstances must be extraordinary, indeed, that would justify resort to such an agent.

8. *Animal charcoal* has been known for many years as a disinfectant of drinking-water, and for the removal of organic gases by absorption, it having the peculiar property of absorbing several hundred times its bulk of noxious gases.

9. *Heat.* — The disinfection of bedding, and all articles of clothing, is best accomplished by exposing them to a heat of from 260° to 300°. This is best effected by the action of steam under pressure: in default of this, the use of the oven is advisable; care being taken that every part of the clothing be exposed. If neither of these methods be convenient, boiling water may be used if sufficiently long applied; and this is important, since recent experiments of Prof. Jeffries Wyman render it quite certain that some of the lower kinds of algæ live in water at 208°; and that solutions of organic matter boiled for twenty-five minutes only, and exposed to air which had passed through iron tubes heated to redness, became the seat of infusorial life. Similar solutions contained in flasks hermetically sealed, and then immersed in boiling water for periods varying from a few minutes to a few hours, also became the seat of infusorial life. The infusoria chiefly belonged to the genera Vibrio, Bacteria, and Monas. But, if the boiling was prolonged to a period of five hours, no infusoria of any kind appeared.

Dr. Letheby, in his valuable report, expresses his opinion that the agents of infection are living germs, capable of reproduction in the human body under certain conditions.

Dr. Harris, Registrar of the New York Board of Health, has written a circular upon the subject of disinfectants, and the man-

ner in which they should be used, from which we make the following extracts: —

"In this circular, the words "infection" and "disinfection" are employed just as they are commonly understood, referring to the preventive causes that are concerned in propagating specific kinds of disease. Their causes are, —

"1. The specific infectious property or substance of any one of the pestilential disorders.

"2. The local impurities and moisture of the house and grounds where the outbreaks of the disease have occurred, or are liable to occur.

"3. The foul exhalations and atmospheric impurities which injure the health, and help to propagate pestilential epidemics."

Dr. Harris's circular is singularly correspondent with the report of Dr. Letheby. He adds to Dr. Letheby's list of disinfectants, quick-lime and sulphate of iron,—the former in powder, for the purpose of absorbing moisture and putrid fluids; and the latter to disinfect the discharges of the cholera patients, and for the purpose of purifying privies and drains. As neither of these substances is volatile, they recommend themselves to the homœopathic physician for the use of the sick-room.

II. WATER.

Perfectly pure water, — distilled water, — however suitable it may be for such domestic purposes as cooking, washing, etc., is not suitable for either man or beast to drink. Although, in a chemical point of view, water containing mineral salt and carbonic acid is impure, yet it is much more grateful to the palate, and more conducive to health. Distilled water, or water freed from carbonic acid and such salts as the carbonate of lime, is insipid, and wants that pure, bright, and sparkling appearance and luscious taste which make it the most grateful beverage for the truly thirsty.

Water which is supplied to great cities by means of suitable

aqueducts, which bring it from pure sources at a distance beyond their contaminating influences, is of course much better than that from city wells. This last, we believe, is a fruitful source of disease and death; its relation to the epidemic and endemic diseases is of the closest character. We shall, as briefly as possible, treat upon the well-water of great cities; and, for the purpose of showing the manner in which well-water may be contaminated, we will speak of that which is supplied by the wells in the city of St. Louis.

The clay that underlies this city is fissured from the surface to the rock below, which is found at a depth varying from twenty to a hundred feet. Consequently, surface-water, with all the impurity it has gathered, readily finds its way to the surface of the rock, carrying with it any substances that may be entirely or partially soluble, and opening a channel for the passage of the many foul fluids that abound in a great city.

The privies of the city are built of brick without the use of cement or mortar, in order that the fluid contents of the vaults may readily escape. They ultimately find their way to the rock beneath. The sewers also are by no means water-tight; fluids readily escape from fractures, or through the porous bricks, when laid in cement or mortar; or, when the quantity of cement or mortar is insufficient, through interstices between the bricks. It is well known also that gas from defective gas-pipes saturates the earth in the immediate vicinity of the defect; and, as this is more or less soluble in water, we have here a third source of impurity in the water found near the surface of the rock.

Besides other modes of polluting the water beneath, the city is traversed by several streams of running water and upon their banks may be found slaughter-houses, glue manufactories, and soap and candle factories; the refuse of these is thrown into the streams. Again, the surface of our city is more or less broken by hollows: these are either sink-holes, which the surface-water has made in its passage to the rock below, or they

are made in the process of the construction of streets. These holes are filled with various abominations; the refuse, the slough of the city, which is still more permeable to the surface-water than the underlying clay. A large proportion of this refuse is organic material, constantly undergoing fermentation and decomposition: the surface-water, passing through it, seizes on deleterious gases and soluble matter, and carries them to the rock below.

Our wells are sunk to the rock, or perhaps to a greater or less distance into it. The water that is obtained is mostly surface-water, containing all the impurities it has gathered in its course. It is not uncommon to find wells within twenty feet or less of several privies, and it would be a miracle indeed if the well did not contain so much impurity as to be perceptible to both taste and smell. But as the water is cool, — much more so than that supplied by the hydrants, — and as habit accustoms one to its use, it is always preferred by the poor and ignorant. Beside its coolness, it has the recommendation of cheapness: it costs nothing, whereas the hydrant-water can be obtained only by purchase or stealth, and the risk of a severe penalty. Is it at all surprising that in our city the victims of cholera are most numerous in districts where the poor are supplied from wells? And not only cholera, but other diseases, prevail more extensively in these localities than where the inhabitants use hydrant water or rain-water.

The London Journal of Pharmacy has an article upon this subject, from which we cannot forbear copying freely. It says:

"The exercise of common sense in the investigation of the conditions to which water has been exposed, aided by the results of analysis, and some knowledge of physiological investigations and the laws of nature, will lead to the following conclusion with reference to wholesome water:

"*First.* All water that has received drainage containing animal and vegetable matter in a state of putrefaction, and

especially excrementitious matter, either is, or is liable to be, in a state unfit for use as drinking-water, and the chemist cannot determine by analysis whether the dangerous state exists or not.

"*Second.* All rivers necessarily receive drainage, and they are generally contaminated with sewage and other decomposing organic matter, which may render the use of such water injurious to health.

"*Third.* Shallow wells situated in large towns are subject to pollution from infiltration, from leakage of sewers, and other similar causes; and, as these waters are stagnant, the organic matter present if it has not passed, is liable to assume its most dangerous conditions.

"*Fourth.* Spring-water, when favorably situated, is free from suspicion of containing organic impurity that could prove injurious.

"*Fifth.* Rain-water, if properly collected and stored, is the best and safest water to use for domestic purposes, and especially for drinking.

"*Sixth.* In the absence of rain-water or good spring-water, the best and most palatable water should be selected from other sources, choosing that which is most free from organic matter, and which has been least exposed to sewage contamination. In order to guard, as far as possible, against the influence of living germs, by which it is supposed that disease may be propagated, it is recommended, on the highest authority, that, when water to which a suspicion attaches is used for drinking purposes, it should be previously boiled, the heat of boiling water being destructive to the vitality of such germs. A supply sufficient for the day should be daily submitted to the boiling temperature; and this, after it has cooled, may be rendered more palatable by the addition of a little syrup of lemon, or even a few drops of sulphuric acid."

Upon this subject, the Technologist, says: "Whatever be the

nature and quality of the earthy substances held in suspension in turbid water, it becomes fit for drink in from seven to fifteen minutes, if to each litre there be added forty milligrammes of finely powdered alum, care being taken to agitate the liquid when the alum is introduced; this is about three fourths of a pound to a ton of water. If potash-alum is used, the alum is decomposed into sulphate of potassa; this is all dissolved by the water and sulphate of alumina, which, by its decomposition, purifies the water. The alumina separates in an insoluble form and carries down with it, as it precipitates, the substances which rendered the water turbid and the organic matter. The acid attacks the earthy and alkaline carbonates, and transforms them into sulphates. The water becomes slightly richer in bicarbonates and free carbonic acid, whilst all organic matter is destroyed. Seven parts of sulphate of alumina will purify as much water as ten parts of rock-alum or potash-alum; and the sulphate of alumina does not introduce any alkaline sulphate into the clarified water."

V.

ALCOHOL AS A HYGIENIC AGENT.

BY C. W. BOYCE, M.D., AUBURN, N. Y.

THE hygienic use of Alcohol must be determined in the same manner as is its therapeutic use; that, is by thorough provings and re-provings as exhaustive as those of any other article of the materia medica.

Fortunately for us (and as unfortunately for the provers generally), there have been, from time immemorial, plenty of provings of this substance; and plenty of records of these provings have been preserved for our use. No medicinal substance has been so frequently and persistently used in all ages as alcohol. The effects are singularly uniform upon all classes and ages, varied, of course, by temperament and climate.

Alcohol affects primarily the nervous system, and, through this, the general system. In doses not too large, it is a stimulant, and, in larger doses, narcotic. In pathology it would be be said that the first effects are, to excite the nervous system, and more especially the brain, causing it to act with more energy, quickening all the functions, and stimulating the system generally.

Concentrated alchohol is a rapid poison, producing death in a remarkably short time by its destruction of the vitality of the nervous system. After long and excessive use of alcoholic liquors, the brain has been found hardened, and resembling its consistence after its removal from the cranium and immersion in alcohol.

The symptoms, produced by alcohol, are well described in brief, by Stillé: "Alcoholic drinks have for their direct effect to quicken all the functions, to excite the pulse and animal heat, promote the flow of thought, augment the muscular strength. The face becomes flushed, the eyes are brighter, and a feeling of increased power, both mental and physical, is experienced, accompanied with a disregard of obstacles in the way of accomplishing proposed objects, or a singular misconception of their magnitude. The modest man grows bold, the timid despises danger, the taciturn becomes garrulous, the imaginative enjoys a livelier flow of thought, and, in general, all the faculties, both mental and moral, assume a more genial action."

Wilson says: "With his progressive intoxication, an extreme loquacity hurries the individual along into every form of indiscretion, tears the veil off his character, and betrays him into intemperate attacks upon others, or into independent avowals with reference to his own thoughts and actions. His imagination revels in unassociated and distorted images; his memory fails; his ideas elude him; and, while still speaking, he forgets the subject of his discourse, and maunders without judgment and without coherence; his virtues decline into defects; his courage becomes bravado; his liberality, profusion; his friendship, fawning. Meanwhile his physical agitation is in proportion to the disorder of his intellect. The face is flushed, the eyes flash, the brain throbs, and the action of the heart is incredibly excited. Extravagant gestures, reckless and inconsiderate actions, shouts, snatches of songs, and other tokens of frantic gayety, are alternated with complaints, and expressions of resentment, and brawling anger, alike without definite aim or reason. He misapprehends what he hears and sees, and yields to his misapprehension. In short, he is insane."

Permanent insanity is a frequent result of the excessive and continual use of alcoholic liquors. All careful observers have found that, where the causes of insanity have been ascertained,

a large percentage of the cases have been produced by intemperance.

By applying the law of *similars* to the use of alcohol, it will be seen at once that we have in this substance an excellent article for the prevention and cure of insanity. As hygienists, we have only to do with the prevention of disease, where there is a tendency to it; so we instance only those cases where alcohol may prevent the setting in of serious trouble.

Where the brain and nervous system are overtaxed, and are likely to break down, and insanity threatens, we may confidently hope to prevent it by the judicious use of some form of alcoholic liquor; always providing that the subject will avoid the continuance of the cause, and yield to proper hygienic influences. And we may properly suppose that the brain and nervous system are preserved from utter destruction in many persons who overtax themselves with brain-work continuously. It is a common remark that the majority of our statesmen are in the constant habit of using, moderately, alcoholic liquors. Wine is said to be the best form for this purpose.

From the symptoms as detailed above, we should expect excellent effects from alcohol in cases of nervous excitement where all control of the nerves is lost, and the patient gives up to his impulses without the restraint of his judgment. This condition is best illustrated by a case in point.

Mrs. H——, a highly educated and withal a very nervous lady, who had always been tenderly cared for and who had never known any great sorrow, had the misfortune to lose her husband some three years ago. She nursed and cared for him through his sickness, and sat by his body until its burial. When she returned to her house after the funeral, she was found in a strangely agitated state, and could not control her actions. She talked hurriedly and strangely. Her eyes were unnaturally bright. She screamed at the top of her voice every few minutes, and resembled one in a state of intoxication. All usual

remedies were tried without relief. Opium in varied doses was tried without effect. Small quantities of whiskey frequently repeated soon calmed the excitement, and gave her the much needed rest. The judicious repetition of this potent remedy undoubtedly prevented serious trouble.

Dr. Flint says: "As a rule, the mental exaltation produced by alcohol is followed by reaction and depression, except in debilitated or exhausted conditions of the system, when the alcohol seems to supply a decided want." If Dr. Flint had said physical, as well as mental, depression, he would have been more correct; for who that has proved alcohol even occasionally can doubt that physical prostration is an effect of the injection of this poison? In some cases prostration is the only effect. In this state of the system alcohol produces its grandest effects hygienically. When the system is enervated and the physical powers prostrated without any apparent disease, — in fact, resembling the state produced by alcohol, — then we may rely on this agent to render us good service.

In weakened conditions from loss of blood, where long-continued diseases have left the system prostrated; after shocks to the nervous system from accidents or operations, and debility from long-continued suppuration, — alcohol is the main remedy to ward off actual disease, and often conducts the case to health, when, without it, death would have been the result. Well-attested reports of cases, treated with and without alcohol, are in evidence to prove this position; yet it must be properly and judiciously administered to do good. Improperly used, alcohol is always a poison.

A case in illustration of the use of alcohol in debility from loss of blood may be of interest.

Mrs. B——, in labor with her first child, had a first-rate delivery, and seemed doing well, until after the birth of the child, when the placenta was found adherent. In the effort to detach it, there came on such profuse flowing that the blood

gushed out to the full size of the opening. In a very few seconds she fainted, and continued to faint from time to time until long after the flow ceased. This condition lasted for several hours, and ceased only on the exhibition of a few spoonfuls of wine. Afterwards Mrs. B—— said that at no time in her life did she ever experience such wonderful effect from anything as from that wine. She said that it went instantly all through her.

It is a very general belief that alcohol enables the system to endure exposure to cold, and that a person who uses it freely will be able to bear a low temperature better than one who never uses it. The best evidence does not corroborate this idea. Dr. Hayes, the Arctic explorer, says: "While fresh animal food, and especially fat, is absolutely essential to the inhabitants and travellers in Arctic countries, alcohol is, in almost any shape, not only completely useless, but positively injurious. . . . Circumstances may occur under which its administration seems necessary; such, for instance, as great prostration from long-continued exposure and exertion, or from getting wet: but then it should be avoided, if possible, for the succeeding reaction is always to be dreaded; and, if a place of safety is not near at hand, the immediate danger is only temporarily guarded against, and becomes finally greatly augumented by reason of decreased vitality. If given at all, it should be in very small quantities, frequently repeated, and continued until a place of safety is reached. I have known the most unpleasant consequences to result from the injudicious use of whiskey for the purpose of temporary stimulation, and have also known strong, able-bodied men to become utterly incapable of resisting cold in consequence of the long-continued use of alcoholic drinks."

In Flint's *Physiology*, page 109, we read: "Nor does experience show that alcohol enables the system to endure a high temperature any better." The intimate acquaintance of Sir Charles Napier with the habits and wants of the Indian soldier can be doubted by no one; and the following is his testi-

mony in favor of the abstinence system (delivered in his own characteristic manner), as contained in his address to the Ninety-sixth Regiment, when he reviewed it at Calcutta, May 11, 1849:—

"Let me give you a bit of advice; that is, DON'T DRINK. I know young men do not think much about advice from old men. They put their tongue in their cheek, and think that they know a good deal better than the old cove that is giving them advice. But let me tell you that you are come to a country where, if you drink, you're dead men. If you be sober and steady, you'll get on well: but if you drink, you're done for; you'll be either invalided, or die. I knew two regiments in this country; one drank, the other didn't drink. The one that didn't drink is one of the finest regiments, and has got on as well as any regiment in existence. The one that did drink has been all but destroyed. For any regiment for which I have a respect (and there is not one of the British regiments that I don't respect) I should always try and persuade them to keep from drinking. I know there are some men who will drink in spite of the Devil and their officers; but such men will soon be in hospital, and in this country, very few that go in, ever come out again."—*Carpenter's Prize Essay*, page 118.

VI.

FORMATION OF SOUND TEETH.

BY HENRY S. CHASE, M.D., D.D.S., ST. LOUIS.

THE causes of the rapid and early decay of the teeth well deserve a thorough investigation. Having, for several years past, given considerable thought and study to this subject, I propose, in this paper, to call the attention of the Institute to the effect of mal-nutrition in fœtal life on the imperfect and unhealthy development of the teeth, and their consequent liability to premature decay. These considerations, better appreciated perhaps by dentists than by the medical faculty, are of vital importance to the comfort and health of this and future generations.

If the physical character of American teeth is to be improved, so that they may, in a not distant future, become a blessing, instead of, as now, almost a curse, we must look to the periods of gestation and lactation as the times, above all others, for the inauguration of those measures which may with much probability insure well-developed and calcified, dental structures which shall afterwards, by the aid of enlightened hygiene, resist the ordinary tendencies to destructive disintegration.

The jaws and teeth are among the earliest formed organs of the human embryo. As early as the twenty-sixth day, the formation of the under-jaw commences; and, as soon as the fifty-sixth day, the first germs of the teeth appear. Ossification comences also at a very early date, and continues without interruption, if the processes of nutrition are natural and regularly performed. At birth, therefore, a large portion of the skeleton

of the child is more or less ossified, and the temporary teeth are far advanced towards the completion of their crowns. Not only are the temporary teeth in process of formation during fœtal life, but the permanent ones also, and their calcification has taken place to a considerable extent before the usual period of weaning.

A multitude of well-known facts prove that the teeth are subject to all the conditions of nutrition which influence any other portion of the child's body. Indeed, we often have in these organs indelible marks of disease, both local and constitutional, which have failed elsewhere to leave visible effects. We see the notched incisors and pitted enamel of syphilis; the transverse furrows of arrested growth in mal-nutrition from acute diseases; and the imperfect dentification and calcification of the teeth from scrofula.

That the character of the teeth of the offspring is influenced by the condition of those of the parents at the time of conception, should not be doubted. Not only may the external characteristics of the father's teeth be transmitted to the child, but their histological peculiarities also. Furthermore, a decayed and diseased condition of the father's teeth may impress a similar tendency to decay on the teeth of the child. If the offspring is thus influenced by the father, how much more have we reason to believe that the mother, who carries the child, and from whose blood it receives its daily nourishment, will impress upon the teeth of her child the peculiar condition of her own! Facts without number sustain us in these views.

Are there other conditions besides those of disease which affect the *fœtus in utero?* Doubtless there are. There may be a continued state of mal-nutrition of the child's teeth without positive disease. There may be a lack in the mother's blood of lime-salts sufficient for the nourishment of her own bones, teeth, muscles, etc., etc., together with those of her child. It is well known by physiologists that a definite proportion of these

salts are daily excreted and cast out of the body. They are the effete particles which have been used and are no longer available for nutrition.

This being the case, it is evident that the mother must furnish her blood with an extra amount of lime-salts while she carries a child, which has to form a large quantity of osteogenous tissue.

From careful estimates, it seems that a mother weighing one hundred and forty pounds must furnish her blood with thirty-seven grains of phosphate of lime daily for the *waste* of her own body and that of her child, together with that needed for the growth of the latter. This is the average daily call, from conception to the usual time of weaning, eighteen months. These thirty-seven grains of phosphate of lime will be found in the quantity of food which the mother's healthy appetite would crave, provided the food be not deprived of those chemical elements which Nature has given it. We may find this amount of phosphate of lime in twenty-eight ounces of beef, or thirty-four ounces of unbolted wheat-meal. There is a pretty constant proportion of this salt in every kind of flesh, vegetable, and fruit, though different kinds of food are not equal in this respect.

In the cereals the phosphate of lime is invariably associated with the gluten of the grain, and not with its starch. The gluten-cells of wheat constitute but a single layer, being immediately under the inner bran-coat and adhering to it. Within this shell of gluten is a mass of starch-cells, white, glistening, and beautiful. The gluten-cells are dark, and become still more so by heat. But the gluten-cells contain the phosphate of lime, while the starch-cells are without it. In the process of making superfine flour, the starch-cells are separated from the gluten-cells. The latter are carefully excluded by the miller from the fine flour; and what is the result?

Horsford, quoted by Lehmann, found the ash of the wheat-grain to be 3.13 per cent; that of fine wheat-flour 0.7, or less

than one-fourth of the former. Superfine flour is more than 75 per cent starch.

Johnston, of England, found ten times more ash in bran and shorts mixed, than he did in superfine flour.

Mayer, of Germany, states that he found fifteen times more phosphoric acid in unbolted wheat than he did in fine flour.

If these are facts, to what conclusion must we come? Certainly, to this,—that no mother, feeding her child from the products of her own blood, can, by any possibility, perform that office naturally on a diet composed mostly of fine flour. This attempt is ignorantly made by thousands of our countrywomen, and signally fails. It is indeed a lamentable fact. It is an evil of enormous magnitude, and its dire effects are not limited to the teeth of the child but extend also to other portions of its body. We must suppose the bony system itself to be dwarfed by this lack of bone-material. And is it not fair to suppose that one of the causes of the short stature of men in the older States, and particularly of women, is the want of phosphate of lime in their food? This pernicious system of diet is not confined to uterine or nursing life, but follows the child more or less to adolescence.

Much of the lassitude and weakness of the *enceinte* and nursing mother arises from the lack of phosphoric acid in her system, which she might easily have supplied by partaking of food not robbed of its natural elements.

Is it surprising that so many students, both male and female, break down, when it is known that the operations of the mind demand a quantity of phosphoric acid proportioned to their activity and force?

Chemistry shows that nature has provided, in every kind of flesh, vegetables, and fruit, all the elements which the human body requires for its support and growth, and in abundance, too. There is a wide range for selection, and the demands — and caprices even — of age, health, temperament, climate, and employ-

ment may be met, without depriving the body of any of the elements which it needs.

That fine flour is the chief food of thousands upon thousands of women and children is well known. Its disastrous consequences should be equally made public.

VII.

SHEDDING OF DECIDUOUS TEETH.

BY HENRY S. CHASE, M.D., D.D.S., ST. LOUIS.

THE physiological process by which the roots of the milk-teeth are removed, so that their crowns may be easily displaced, thereby giving room for the teeth of replacement, is, to my mind, very simple and beautiful, although so seemingly obscure to those who have heretofore written on the subject.

It has been said that the roots are removed by absorption. This is a term that is often applied to very different physiological motions. Pressure of the advancing tooth of replacement on the roots of the temporary teeth has been said to cause their absorption. This may be so in some cases, but facts bear me out in the enunciation of the law which I stated several years ago; viz., "Absorption of the roots of the deciduous teeth takes place in the ratio of the advancement of the teeth of replacement, independently of their topographical relations."

Deciduous teeth lose their roots even though the teeth which replace them pierce the jaw at an abnormal distance. It cannot be said truthfully, that the deciduous teeth lose their roots at a certain age, independently of the development of the tooth of replacement. When the latter are never developed and do not appear, it is the rule that the temporary teeth are retained without losing their roots, and often for forty years or more.

A child at five and a half years ceased growing. No further development of mind or body took place, and at the age of

twenty-four years the temporary teeth were all retained, and no teeth of replacement had appeared.

But what is this process of absorption? The word has no histological meaning when applied to the movement which it is intended to explain. The change which causes the loss of the roots of temporary teeth is one of differentiation. It is a retrograde physiological process, the reverse of that which caused its development and growth. It is a process of disintegration, caused, not by chemical transformations, but a vital change of form in its microscopical character.

What initiates this change and carries it on? It is the tooth itself. Or it is that Presiding Power which called the tooth into existence. No foreign body has any control over it; no "carneous body," "gum," "blood-vessels," or "absorbents," take away the roots of these teeth, particle by particle. But when the mysterious Presiding Power calls upon the teeth to remove their crowns from the body, in obedience to that mandate commences the beautiful motions which I will now endeavor to describe.

Near the bottom of the alveolus the pericementum becomes thickened by a multiplication of its connective tissue-cells, and a conversion of the cementum-cells into connective tissue-cells. A liquefaction of the lime and other earthy salts of the cementum-cells takes place before this differentiation; they are passed by osmotic action from cell to cell until they are carried into the capillaries, and from thence through the general circulation to the kidneys, and cast out in the urine. And this is of necessity true in regard to the differentiation of all the hard dental tissues; for we know it would be impossible for bone-cells, dentine-tubes, and enamel-cells to change their shape when encased in an unyielding armor of phosphate of lime.

Preceding the differentiation, there is always liquefaction of lime-salts. Cell after cell of cementum is changed into connective tissue-cells until the dentine-tubes are reached. Then the

cells of which these are composed are similarly metamorphosed. And so, too, with the enamel-cells of which its prisms are made up.

The differentiation of enamel does not take place to any great extent, because there is no physiological necessity for it, as the end to be obtained is merely a removal of the roots, which would ensure the shedding of the crown. Still the energy of the process is sometimes so great that its motions are carried beyond necessary bounds, and we find portions of the enamel removed high up on the crown.

While these active processes are at work on the exterior of the tooth, the dental pulp and its vessels within the crown and roots are not inactive. The pulp continually grows larger by the addition of cells to itself, differentiated from the dentinal tissue around it, until at last nothing is left of the crown of the tooth but a thin shell composed of enamel tissue only.

The horns of the pulp, which reach up into the cusps, enlarge by the metamorphosis as soon as the body of the pulp, and it would seem in some cases much more rapidly; as may be seen in some specimens of prematurely extracted crowns. The dental pulp itself is converted into a mass of simple cells, excepting its artery and vein, which are the last to be metamorphosed, for they are needed as carriers of food and effete materials, until towards the last of the process.

What becomes of this mass of highly active cells, into which the whole tooth has been changed? Those nearest the walls of the alveolus undergo still another change: processes shoot out from their sides, which thus connect cell with cell, and they become bone-corpuscles. These appropriate the lime-salts which they require from the blood, and thus perfect themselves as a part of the true maxillary and alveolar tissue.

And these gradual motions continue until the whole space lately occupied with cells is found to be bone. The completion of this process is not attained until after the expulsion of the

crown; for we find, on lifting the crown from its bed, that at its base is a mass of red cells, rising above the margin of the gum and forming a slight tumor, showing the hollowed crown to have been filled with it. A microscopical examination of the crown shows portions of it, which had been in contact with this mound of cells, to have the same histological character as the latter, — a border decalcified and differentiated. Sometimes the interior metamorphosis of the crown goes on more rapidly than that which is taking place in the roots, and then the latter are retained in the jaw sometimes after the crown has fallen.

Suppose a temporary tooth is decayed and the pulp is dead? Then of course no vital changes take place in the crown, and the roots must do all the work, to liberate themselves and their heads What if the roots are themselves dead? Then of course no vital action can take place in them, or have any effect on them; and the only way they are removed is by chemical disintegration, or by displacement bodily by advancing tissues beneath and around them.

I have spoken of this process of shedding, as though no tooth of replacement was advancing or contiguous to its temporary predecessor. This was merely to simplify the process, and it occasionally actually happens. In the case of temporary molars, the following bicuspids are immediately beneath them, and often in close proximity to their roots. Then, as the dental tissues do not need an extended differentiation, those that are not required for a more or less permanent organization are immediately liquified, and pass into the circulation for removal.

I cannot for a moment entertain the opinion held by some, that the broken-down dental tissues are appropriated by the teeth of replacement to build up their own organizations. I believe that these are *effete* materials, and that freshly organized matter is necessary for the perfect nutrition of the permanent teeth.

2 GAL 800